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**ASSISTANT** or Manager; steady, smart, sober, and thoroughly experienced all round; 5 ft. 7 in.; middle-aged; good Counterman and Prescriber; Extractor and Photographer. "P., Alma, King's Road, Walton-on-Thames.

**PART-TIME** or full; abstainer; 38; qualified, but slightly deficient in experience; small, middle-class establishment, where opportunity of improving; any locality; nominal remuneration; outdoors. 93/31, Office of this Paper.

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**PHARMACEUTICAL** Chemist, married (no family), middle-aged, through misfortune offers his services as Manager, where honesty, sobriety, push, and hard work would be appreciated; abstainer and good Prescriber; this is genuine; moderate salary accepted. "Chemist," Hambledon, Hants.

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*Special charges are made for Advertisements under this heading, which can be obtained on application.*

Advertisers are reminded that if they wish replies to their Advertisements addressed to the Office of "The Chemist and Druggist" under a figure or nom de plume, to be forwarded, an extra charge of Sixpence is made, and such amount should be added to the remittance for the Advertisement. If letters are called for, no extra charge is made.

**MCADAM & TUCKNISS**, Sharedealers, 30 Tranquil Vale, Blackheath, London, S.E. Telephones 81 and 81A Lee Green.

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**ELECTRO-SILVER PLATING**.—Please write for Price-list.—Our Plating invariably gives long service and much satisfaction; prompt return of all work entrusted to us; free collection and delivery by our vans in London and Suburbs; carriage paid one way on country orders. Idris & Co. (Limited), Plating Department, Syphon Factory, Camden Town, London, N.W.

**FINEST** quality English honey (season 1904), 65s. cwt., 35s. for ½ cwt.; 1-lb. tie-over jars, 8s. 6d. doz.; 1-lb. patent screw-lid jars, 10s. doz.; beeswax (finest), 1s. 10d. per lb.; free on rail; samples on application. Hinde, Chemist, Stoke Ferry, Norfolk.

**CUSTOMERS** wanted by J. Albert Schmidt, Solingen (Germany), for his Specialities:—The Jacatra self-acting Cook (every housewife buys it) Preservatif; L'Absorbent, Manicure and Pedicure Instruments, Face-massage Instruments, Razors and Barber Shears, Advertising Specialities, Sponge-cleaner, Home Trainer and Developer; Get Healthy and other Specialities. Illustrated Lists post free.

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## Bankruptcies and Failures.

*Re* EDWARD OWEN, Broad Street, Newtown, Montgomeryshire, Pharmaceutical Chemist.—Under this failure the Official Receiver of the Shrewsbury County Court reports the payment of a composite dividend of 7s. 6d. in the pound.

*Re* CHARLES LAMB, 61 Mark Lane, E.C., Chemical Merchant and Agent, trading as Charles Lamb & Co.—The first meeting of creditors was held on Thursday, August 18, at the London Bankruptcy Court, before Mr. H. E. Burgess, Assistant Receiver, who reported that the debtor had stated that he commenced business in January, 1880, at 60 Mark Lane, with 1,000l. capital, one-half being a loan from his wife. At first he did fairly well and made a profit of 500l. a year, but being hardly hit by bad debts he executed a deed of assignment in 1891, under which the creditors received 7s. 6d. in the £. He continued the business and drew 500l. a year, but in consequence of further bad debts he executed another deed of assignment in July, 1902. Nothing had up to the present been paid thereunder to the creditors. He then removed to 61 Mark Lane, and reduced expenses, but was unable to make both ends meet. His previous failures had crippled his credit, and on July 18 he filed his petition to avoid a committal order. Bad trade and want of capital were the reasons assigned for the present failure. A statement of affairs had been filed showing total liabilities 2,222l. 0s. 4d., of which 2,105l. 0s. 4d. was expected to rank against assets valued at 52l. 11s. 2d., after deducting 17l. for the preferential claims. In the absence of any offer the case was left in the hands of the Official Receiver to be wound up in bankruptcy, the public examination being fixed for September 20. The following are some of the creditors:

### Unsecured.

	£	s.	d.
Bevan, Dr., High Road, Lee ...	62	16	6
Berk, F. W. & Co., Fenchurch Avenue, E.C. ...	20	17	11
Breaks, S. & Son, Wyke, Bradford ...	15	0	0
Bailey, S. Y. & Co., Stroud ...	13	10	3
Garton, Hill & Co., Battersea ...	24	7	1
Grimshaw Bros. & Co., Manchester ...	16	7	5
Harrison, W. & Co., Mincing Lane, E.C. ...	14	3	1
Hemmingway & Co., Stratford ...	13	7	11
Lovering, J. & Co., St. Austell ...	34	2	6
May & Baker, Battersea ...	28	17	4
Mayor & Co., George, Love Lane, S.E. ...	16	10	1
Paterson, W. H., Finsbury Circus, E.C. ...	29	12	8
Singleton, Buck & Co., Manchester ...	25	15	0
Scottish Cyanide Company, Leven, Fife ...	14	14	5
Three Mills Chemical Company, Bromley-by-Bow ...	62	1	1
Walter, J. C. & Co., Billiter Street Buildings, E.C. ...	12	5	1
Skelbeck Bros., Upper Thames Street, E.C. ...	9	13	3
Brice & Rumpff, Fish Street Hill ...	204	13	5
Caudery, W. & Co., Fenchurch Av. ...	60	0	0
China Clay Company, Manchester ...	37	1	0
King, D. (exors. of), 60 Fenchurch St. ...	100	0	0

### Partly Secured.

Caudery, W. & Co., 1 Fenchurch Avenue, E.C. ...	10	7	7
Typke & King, 16 Mincing Lane, E.C. ...	24	16	10

THE FOLLOWING EDUCATIONAL INSTITUTIONS are advertising in this issue:

- South London School of Pharmacy, 325 Kennington Road, S.E.
- Westminster College of Chemistry, Trinity Square, Borough, S.E.
- Metropolitan College of Pharmacy, 160 to 162 Kennington Park Road, S.E.
- London College of Chemistry, 323 Clapham Road, S.W.
- City of London College, White Street, Moorfields, E.C.
- Burlington Correspondence College, 8 Crescent Grove, Clapham Common, S.W.
- Leeds College of Pharmacy, Clarendon Road, Leeds.
- Royal Dispensary, 21 West Richmond Street, Edinburgh.
- West of Scotland College of Pharmacy, 157 St. Vincent Street, Glasgow.
- Liverpool School of Pharmacy, 6 Sandon Terrace, Liverpool.
- National Dental Hospital and College, Great Portland Street, W.
- University Chambers (Mr. Knox and Mr. James), 38 Museum Street, W.C.

## Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks at the Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost £1, obtainable through any money-order office.

(From the "Trade-marks Journal," July 27, 1904.)

"EREDAL"; for photographic chemicals. By H. Edmund & Co., 3 Ezra Buildings, Columbia Road, Shoreditch, E. 264,543.

Representation of dogs; for goods in Class 2. By Benbow's Dog-mixture Company, 181 Aldersgate Street, E.C. 262,587.

"IVINSON & HALL"; for plant-insecticides. By Ivinston & Hall, also trading under the style of the I.V.O. Kill-All Chemical Company, 45 Burmantofts Street, Leeds.

"SPIRODOOMO"; for a fly-catcher. By J. H. Smith, 10 Bridge Street, Newark-on-Trent. 264,046.

Owl device; for chemicals and perfumery. By C. J. Hewlett & Son, 40 Charlotte Street, E.C. 262,995, 262,998.

"REDEVER"; for chemicals. By J. G. Stidder, 51 St. Margaret's Road, Brockley, S.E. 264,373.

"RADIUMITE" ("Radium" disclaimed); for chemicals and anti-corrosives. By J. L. Crawford, Fairlight, Vanbrugh Park Road, Blackheath. 264,534, 264,834.

"INGRAMINE," and signature for chemicals. By A. S. Ingram, 20 Quernmore Road, Stroud Green. 264,541.

Device of extinct volcano; for chemicals. By Burroughs Wellcome & Co., Snow Hill Buildings, E.C. 262,231.

"SONBODIA"; for a salve. By J. Dobson, 9 Institute Row, W. Sleekburn, Morpeth, Northumberland. 264,220.

"LETHICA"; for elastic hosiery. By Thomas Glover & Son, Chesterfield Street Mills, Carlton, Notts. 263,857.

"COOEYATTA"; for a prepared food. By C. J. Kerr, c/o R. L. Wood, Lloyds Bank Chambers, Cheltenham. 263,031.

"D. HOLDING" (a written signature); for laundry-preparations. By D. Holding, 7 Broadfield, Ostwaldtwistle, near Accrington. 263,346.

"HARCITINE"; for a preparation for the hair. By K. Smithson, 33 Craven Terrace, W. 264,163.

(From the "Trade-marks Journal," August 3, 1904.)

"DAFENOL"; for a photographic developer. By O. Schölzig, Dashwood House, New Broad Street, E.C. 264,205.

"AHOY," and device of a stove; for chemicals. By Chemische Werke Hansa Gesellschaft mit beschränkter Haftung, Brüggeweg, Hemelingen, nr. Bremen. 259,786.

"PHENIX" and device; for a chemical for renovating moulders' sand. By J. W. Towers, Croft Street, Victoria Road, Widnes. 264,028.

"DAYDREAM"; for chemicals. By the Pure Chemical and Spice Company, 50 Tower Buildings, 22 Water Street, Liverpool. 264,437.

"MICROL"; for soap. By the Co-operative Wholesale Society (Limited), Balloon Street, Manchester. 263,377.

"VIO"; for sanitary and veterinary chemicals. By William Edge & Sons (Limited), 50 Raphael Street, Bolton. 264,350.

"RHEUMASAN"; for chemicals. By Dr. R. Reiss, 22 Knebeckstrasse, Charlottenburg, near Berlin. 263,207.

"ACIDOL"; for chemicals. By Actien Gesellschaft für Anilin-Fabrikation, Treptower Brücke, Berlin. 263,431.

Device of church and monogram R.P. (Reductions-Pillen); for pills. By M. Fekete, 16 Krugerstrasse, Vienna. 263,923.

"ANESTIFORM"; for a medicine. By Oppenheimer, Son & Co. (Limited), 179 Queen Victoria Street, E.C. 264,063.

"CANONNE," and device of a cannon; for chemicals. By H. Canonne, 49 Rue Réamur, Paris. 264,274.

"FORMAMINT" ("Form" disclaimed); for chemicals. By Lüthi & Buhtz, 86-83 Mauerstrasse, Berlin. 264,704.

Device of an owl; for surgical instruments, apparatus, &c. By C. J. Hewlett & Son, 40 Charlotte Street, E.C. 262,996.

"A. D. BATEMAN"; for an ear-trumpet. By A. D. Bateman, 26 Brown Street, Manchester. 264,256.

"FETRON"; for chemicals, food-substances, and perfumery. By Chemische Werke Hansa Gesellschaft mit beschränkter Haftung, Brüggeweg, Hemelingen, nr. Bremen. 260,027, 260,467, and 260,030.





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AUSTRALIA.

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### AS AN OFFICIAL ORGAN

THE CHEMIST AND DRUGGIST is supplied by subscription to the whole of the members of NINETEEN PHARMACEUTICAL SOCIETIES, viz.:-

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### A SURE THING.

THIS is particularly applicable to THE CHEMIST AND DRUGGIST Supplement, and we call the attention of all to this week's issue. The Supplement is a splendid medium for advertising all the wants of retailers and wholesalers in respect to assistants and business generally. Terms for advertisements will be found on reference to the Supplement itself, and no one should fail to notice that the disposal of surplus stock by retailers is speedily effected by advertising therein.

### Summary.

SOME interesting Russian items will be found on page 356. INDUSTRIAL EXHIBITIONS at Paris and at Bradford are reviewed on page 372.

OUR STAFF MUSE has been inspired by the charms of Harrogate this week (p. 357).

ELECTROLYSIS is the subject of the "Corner for Students" page this week (p. 350).

DIFFERENT VIEWS of the effect of the spirit duty in South Africa are mentioned on p. 355.

A COMPLETE LIST of the medical and dental companies in Great Britain and Ireland is given on p. 374.

MR. IDRIS has told to an interviewer a dramatic story of a poison sale he made thirty years ago (p. 365).

A QUESTION as to whether co-operative stores pay income-tax was answered in the House of Commons last week (p. 373).

THE authorities of the Punjab University want an increased grant to teach the Ayurvedic and Yunani systems of medicine (p. 356).

THERE are 1,583 women classed as "chemists and druggists" in the General Report of the 1901 census, about half as many as in 1881 (p. 351).

MR. WALTER JOHN CHURCHILL, of Birmingham, who was for eight years on the Council of the Pharmaceutical Society, has died at Hastings (p. 360).

A WEAK SOLUTION of copper sulphate can be used as a parasiticide for cucumbers and tomatoes without affecting the fruit injuriously (p. 364).

"NRAVER" designates the honorarium which the British Pharmaceutical Conference are to receive for their formula, "hush-money" (p. 361).

MR. J. F. LIVERSEGE, the public analyst for Birmingham, gives in his quarterly report some particulars of the recent checking of dispensing at Birmingham (p. 351).

AN OUTLINE of the work done in the Government Laboratory during a year is given on p. 363. The greater part of the analyses performed are in connection with the spirit duties.

THE REGISTRAR-GENERAL'S REPORT for 1902 shows a decided decrease in the deaths from carbolic-acid poisoning. The mineral acids, on the other hand, are becoming more popular (p. 364).

IF the success of the British Pharmaceutical Conference depended solely on the recorded annual attendances it is easy to compare the relative popularity from the table given on p. 365.

THE PROGRESS of the Transvaal Pharmacy Ordinance is outlined on p. 355. A spirited letter in reference to a proposed alteration of the company clause has been sent to the Attorney-General by the Transvaal Society.

THE SHOP-HOURS BILL received the Royal assent on August 15. The Federation proposal (p. 369) to amend the Bill by the inclusion of Lord Avebury's chemists' clause was too late. Lord Avebury hopes to obtain an amending Act in the next Session of Parliament (p. 365).

FLUCTUATIONS in the markets are fairly numerous, the most important being a slight reduction in quinine. German refined camphor and menthol are lower. Chamomiles, coriander, ergot, orange-peel, and tragacanth are higher; and citric acid, copper sulphate, and rosin are easier. Santonin is very firm (p. 376).

ECHOES of the Sheffield Conference are given on p. 358. The ladies' dresses at the reception and dance are described, and further particulars of the whole-day excursion are given. The photograph on p. 359 showing the members of the Conference grouped on the historic steps of Haddon Hall is a reduction of a large picture which is being sold by Mr. Henderson.

MR. A. J. BALFOUR, President of the British Association, in delivering an address to the Cambridge meeting, contends that inductive logic altogether fails to deal with the problems suggested by the new theories of matter. The theory of natural selection is also inadequate, and he arrives at the conclusion that there is a certain inevitable incoherence in any general scheme of thought which is built out of materials provided by natural science alone. We give an outline of the address on p. 362.

THE FEDERATION OF LOCAL PHARMACEUTICAL ASSOCIATIONS held their annual meeting at Sheffield last week. The delegates approved of the principle of territorial representation, resolved to address Lord Avebury in regard to the Shop-hours Bill, listened to a paper by Mr. Paterson on "Provincial Schools of Pharmacy," and approved of a motion asking the federated Associations to discuss the question of breaking bulk. The Executive were re-elected, Mr. Wippell Gadd, of Exeter, replacing Mr. Turner, of Clifton.

## Corner for Students.

CONDUCTED BY LEONARD DOBBIN, Ph.D.

### Salts, and the Ionisation Theory.

#### ELECTROLYSIS.

ONE of the most remarkable properties of aqueous solutions of typical salts is their power of conducting electricity. The conducting power of such solutions, however, differs markedly from that possessed by ordinary (metallic) conductors, for the passage of the current is invariably accompanied by chemical changes of a very definite kind. When two plates of suitable conducting material (called the *electrodes*), each of which is connected with a separate pole of an electric battery, are inserted, without touching each other, into a saline solution contained in a suitable vessel (called the *electrolytic cell*), a current passes through the circuit, as may be shown by introducing a galvanometer also into the circuit. At the same time it is found that there is a separation of some substance at each of the electrodes, the particular substances depending on the salt dissolved in the solution. In all cases, however, the substances first set free would appear to be the metallic radical and the acid radical, the former at the electrode connected with the negative pole of the battery (called the *cathode*), and the latter at the electrode connected with the positive pole (called the *anode*). The separation of the two radicals of a salt in this way is called *electrolysis*, and the solution, in which it takes place, an *electrolyte*.

The final products of an electrolytic decomposition may, however, be the result of secondary actions, and be entirely different from the primary products. When solutions of cupric salts are electrolysed, metallic copper is deposited on the cathode; but when solutions of potassium salts are electrolysed, although potassium may be momentarily liberated, it cannot exist in presence of the water, and there is immediate formation of potassium hydroxide in the solution surrounding the cathode, hydrogen being simultaneously evolved. When solutions of iodides are electrolysed, iodine is liberated at the anode; but, with solutions of sulphates there is evolution of oxygen, because the sulphate radical ( $\text{SO}_4$ ) cannot exist in the free state, and as soon as it is liberated it interacts with water, forming sulphuric acid in the solution immediately surrounding the anode, and liberating oxygen.

The products of electrolysis make their appearance only at the electrodes, and, as the salt is at first dispersed equally throughout the solution, the metallic radical and acid radical must gradually travel, the one towards the cathode and the other towards the anode. Faraday called these two parts, which travel, the *ions*; the metallic radical, which travels towards the cathode, being distinguished as the *cation*, and the acid radical, which travels towards the anode, as the *anion*.

Solutions of acids and alkalis also conduct, and are decomposed by the electric current—i.e., they are electrolytes—so that in this respect also these substances are to be looked upon merely as special classes of salts; if they are so classed, then the general statement holds: Only salts can form electrolytes. The solid salts themselves are not electrolytes, but their solutions in water (also in some other liquids) are.

In this connection the behaviour of hydrochloric acid may be shortly referred to, as it is interesting and typical. Pure liquefied (anhydrous) hydrochloric acid does not conduct electricity, or, at least, not to any noteworthy extent; in this respect it resembles pure water. Aqueous solutions of hydrochloric acid, however, are good conductors of electricity, and, on the passage of the current, are decomposed into hydrogen and chlorine. A mixture containing about 18 per cent. of hydrochloric acid conducts better than any other mixture of the two, the conductivity falling off as the composition recedes from that value. Similar behaviour is observed in the case of acids which are miscible with water in all proportions—they show a maximum of conductivity at some intermediate dilution.

Owing to their limited solubility in water, the majority

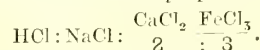
of metallic salts do not behave like the acids in the above respect, for the saturated solution is generally the best conductor. With very soluble salts, however, the maximum conductivity may correspond to some intermediate concentration, as in the case of the acids.

When the conductivities of solutions of different concentrations are compared, not as regards their *absolute* values, but in *proportion to the quantity of solute they contain*, it is found that, without exception, dilute solutions conduct better than more concentrated ones; so that a solution which is, say, twice as concentrated as another solution of the same substance, is not twice as good a conductor. This improved relative conductivity of dilute solutions can be easily demonstrated as follows: An electrolytic cell is built up in the form of a tall rectangular box, having the bottom and one pair of opposite sides composed of non-conducting material (glass), while the remaining pair of sides is composed of (or lined with) metallic silver; these sides have terminals for connecting with a battery, and form the electrodes of the cell. If this cell is filled with pure water, no current will be indicated on closing the circuit through a suitable galvanometer; but, on removing the water and substituting a small quantity of a somewhat concentrated solution of silver nitrate, a current will pass. If pure water is now added in successive equal portions, and the liquids mixed, the current strength increases with each dilution, but the successive increments steadily become less and less, and at last cease to be recognisable. This experiment shows clearly that the effect produced by a given quantity of salt, under the conditions of the experiment, increases with increasing dilution, and asymptotically approaches a maximum value as the dilution approaches infinity. The conditions which may be specially noted are—(1) the constancy of the quantity of solute between the electrodes; (2) the constancy of the distance separating the electrodes; and (3) the proportional increase of the area of the electrodes with increasing dilution.

The conductivity of an electrolyte is affected by change of temperature, but in the reverse sense to that observed in the case of a metallic conductor; that is to say, the conductivity of the solution increases with rise of temperature.

The exact determination of the conductivity of a solution presents difficulties over and above those met with in the case of metallic conductors, one of the principal of these being due to the effect known as *polarisation*. When these difficulties are obviated, however, the results obtained show that electrolytes obey the same general laws as metallic conductors do—Ohm's law holds in all cases, within the limits of experimental error.

As shown by Faraday, there is a very definite connection between the strength of current passing through an electrolyte and the amount of decomposition which takes place, and the regularities observed are known as Faraday's Laws of Electrolysis. The amount of salt decomposed in an electrolytic cell is in each case proportional to the *quantity* of electricity, irrespective of the rate at which the current is passed, or of the potential at the electrodes, so long as the potential is high enough to overcome the polarisation and keep the current passing. Further, the amount of salt decomposed by a given quantity of current is exactly proportional to the chemical equivalent of that salt. For example, if a number of electrolytic cells, arranged in series, are filled with solutions of various chlorides, and a current of electricity is passed through them (so that the current is exactly the same in every cell), it is found that the quantity of chlorine liberated at the anode is in each case identical, quite irrespective of what the metallic radical may be, provided the conditions are such that secondary reactions do not take place. Thus, if the chlorides were hydrochloric acid, sodium chloride, calcium chloride, and ferric chloride, the quantities of salt decomposed would be in the proportion



In the same way, if a current is passed through a series of salts of the same metallic radical, the quantity of metal liberated is the same in all cases, irrespective of the acid radical. For example, a series



of acids would all yield the same volume of hydrogen at the cathode.

It is evident that salts in aqueous solution are characterised by the readiness with which they undergo chemical changes in which the metallic radical and the acid radical become separated from one another. Double decompositions between salts can take place instantaneously in solution, and the feeblest current of electricity passing through an electrolyte brings about a certain amount of electrolysis. On the other hand, salts, as a class, do not undergo other reactions with any particular readiness. Notwithstanding the rapidity with which silver chloride is formed when solutions of a silver salt and a chloride are mixed, there is no precipitation of silver chloride when silver nitrate is added to a solution of potassium chlorate,  $\text{KClO}_3$ , since the formation of the precipitate would in this case involve the breaking-up of the acid radical,  $\text{ClO}_3$ . Non-saline substances do not, as a rule, exhibit any special tendency to take part in double decompositions, and if they do enter into such reactions, the change is slow and gradual. When silver nitrate solution is shaken up with chloroform,  $\text{CHCl}_3$  (which is appreciably, though sparingly, soluble in water), there is no precipitation of silver chloride; chloroform is not a salt.

## English News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

### Brevities.

The Rev. H. P. Gurney, Principal of the Durham College of Science, Newcastle-on-Tyne, was killed by a fall from the rocks at Arolla on August 13.

The Hants County Council have re-appointed Dr. Arthur Angell public analyst under the Sale of Food and Drugs Acts, and Dr. Bernard Dyer as district analyst under the Fertilisers and Feeding-stuffs Act.

Boston Town Council received ten tenders for the supply of deodorisers and accepted that of Messrs. Gilliat (Limited), of Bargate, for carbonised peat powder at 6s. per cwt. and for disinfecting-fluid at 1s. per gal.

At an inquest held at St. Anne's-on-Sea on the body of Dora McMillan, medical evidence showed that deceased suffered from kidney-disease, bronchitis, and weak heart, and the "headache-cures" she had taken had hastened her death.

Five dogs, including two puppies in the East Essex Hunt, having died mysteriously at Braintree, autopsies revealed the presence of strychnine in each case. A reward of 50l. is offered for information leading to the conviction of the persons who administered the strychnine.

The Board of Trade have received copy of a note from the Russian Ambassador stating that application for permission to import pharmaceutical, medicinal, or hygienic preparations into Russia, with the documents annexed thereto, must be accompanied by a translation into Russian.

Droitwich is languishing because of the serious condition of the salt-industry of the town, which has for some years past been steadily declining. The Corporation is to approach the Salt Union to get back to the borough a fair share of the salt-trade. Balneology is an important branch of the pharmacist's art in that town.

An association has been formed called the British Weights and Measures Association, having for its objects the standardising and simplifying of British weights and measures. Mr. George Moores, of Manchester, has been appointed Secretary, and the headquarters are at 25 Victoria Street, S.W.

A meeting of the Hull Chemists' Trade Association was held at Hull on August 16. There was a good attendance in spite of its being holiday-time, and notwithstanding that attention was well concentrated on the business in hand from start to finish, a number of items were unavoidably left over for the next meeting.

Mary Paterson Patrick (30), a domestic servant, was remanded at Marylebone Police Court, on August 13, on a charge of stealing between March and July last property,

of the total value of 350l., belonging to her employer, Mr. Frank Clark, wholesale druggist, residing at 40 Belsize Avenue, Hampstead; and further with stealing 3s. of his money in December last year.

At the annual exhibition of the British Medical Association held at Oxford from July 26 to 29, the daily journal of Messrs. Cuxson, Gerrard & Co. (Limited), of Birmingham, containing records of orders, inquiries, and moneys received, was on the afternoon of July 29 taken from their stand; and the directors of the company would be glad if medical men and others who ordered goods and made inquiries at that stand would communicate direct with them.

The Thames Valley Chemists' Association have arranged a river-trip for Wednesday, August 24. The steam launch *Balmoral* will leave the landing-stage at the Sun Hotel Gardens, Kingston-on-Thames, at 2 p.m., calling at Molesey Lock (Hampton Court) at 3 p.m., and proceeding up the river. Tea will be served on board. Tickets—gentlemen 4s. 6d., ladies 3s. 6d.—can be obtained from the Hon. Secretary, Mr. Frederick Harvey, 1 Claremont Road, Surbiton.

### Statistics.

The "General Report" on the 1901 census of England and Wales shows that there were 13,608 men and 3,907 women engaged as manufacturing chemists, as compared with 12,845 men and 1,128 women in 1881. The number of chemists and druggists (with assistants) was 25,545 men and 3,105 women, as compared with 21,814 men and 1,583 women in 1881. Of the 28,448 chemists and druggists 452 boys and 187 girls were under fifteen years of age. There were 5,420 men and 534 women engaged as scientific-instrument makers and opticians.

### Analysts' Reports.

The only samples of drugs found to be adulterated in Staffordshire last quarter were two of sweet spirit of nitre. Both were about one-third deficient in the proper amount of ethyl nitrite, but they were of correct specific gravity. The analyst, Mr. E. W. T. Jones, states that the deficiency in ethyl nitrite may have been caused by evaporation during long keeping and frequent opening of the bottles.

The public analyst of Westminster, in his annual report just issued, states that during the twelve months he examined under the provisions of the Sale of Food and Drugs Acts the following samples: Olive oil, 68 genuine, 5 inferior, 7 adulterated; camphorated oil, 12 genuine, 1 inferior; milk of sulphur, 31 genuine, 2 adulterated; iron pills, 10 genuine. Prosecutions were undertaken only in five cases—against vendors of olive oil—and fines and costs to the total amount of 17l. 2s. 6d. were imposed.

The public analyst for Birmingham (Mr. J. F. Liverseege), in his report to the Health Committee of the Birmingham City Council for the quarter ending June, records under the heading "Dispensing of Prescriptions" that three different prescriptions were taken to seventeen chemists and drug-stores to be dispensed. Fourteen of them were for practical purposes correctly prepared; in one sample a slight error had been made, and in two cases there were serious mistakes. The prescription of quinine mixture from which the mixtures had been dispensed ordered 4 dr. of quinine sulphate and 4 fl. dr. of dilute sulphuric acid to be contained in a 6-oz. bottle of medicine (see *C. & D.*, August 13, page 299). Three samples contained quantities of quinine sulphate which did not vary more than 10 grains from the proper quantity for a 6-oz. bottle. Another sample was somewhat weaker than this, probably owing to the correct amount of quinine sulphate being put in a 6½-oz. bottle and the bottle filled. In each case the quantity of dilute sulphuric acid present was approximately correct. One sample contained only 23 grains of quinine sulphate instead of 240 grains and only 141 minims of dilute sulphuric acid, instead of 240 minims per 6-oz. bottle. "This is a very serious difference," says the analyst, "as a dose contains only 1 grain of quinine sulphate instead of 10 grains, as ordered by the prescription." When the case was heard the vendor stated that he reduced the quantity of quinine sulphate as he considered that the amount ordered was dangerous. The Magistrates fined him 2l. and 12s. costs. Each of the six samples of potassium-bromide mixture received had been correctly dispensed, containing quantities

of potassium bromide only differing slightly from the amount ordered by the prescription. As regarded a potassium-iodide mixture, the prescription ordered 6 dr. of potassium iodide to be made up to 6 oz. with chloroform-water. Four samples contained within a few grains of the theoretical quantity of potassium iodide per 6-oz. bottle; two of them contained traces of lime salts, probably due to the chloroform-water having been prepared with tap-water instead of distilled water as required by the British Pharmacopœia. One sample contained practically the correct quantity of potassium iodide, but only a very small proportion of chloroform-water, and the vendor was cautioned by the Health Subcommittee. Another sample was analysed and found to contain 382 grains of iodide of potassium per 6-oz. mixture. The bottle was examined and found to be of a capacity of  $5\frac{1}{4}$  oz. instead of 6 oz. The quantity of potassium iodide put into the bottle was therefore 334 grains, instead of 360 as ordered by the prescription. The most serious mistake, however, was in the label, which gave the dose as one tablespoonful instead of one teaspoonful three times a day. As the maximum Pharmacopœia dose is 20 grains, the administration of 32 grains three times a day might be attended by serious consequences. The medicine had been dispensed by an unqualified assistant. The vendors were ordered to pay 9s., the costs of the prosecution.

#### Wheat Starch in Cream of Tartar.

The 123 articles analysed by Mr. G. R. Thompson, public analyst for Monmouthshire, during the past quarter included five samples of cream of tartar, four of camphorated oil, two of liquorice powder, and one each of magnesias, tartaric acid, friar's balsam, quinine, and syrup of rhubarb. Excepting milk, the analyst points out that the only case of adulteration was a sample of cream of tartar which contained 23 per cent. of wheat starch. He had carefully sought for lead and other poisonous metals in the cream of tartar samples, but had not found them to contain more than a trace in most cases—in fact, two of them were absolutely free. The remaining samples were generally of good quality. The drug-samples gave satisfactory results, and were in all respects up to the Pharmacopœia standard.

#### Sheffield Notes.

Mr. G. E. Scott-Smith, F.I.C., F.C.S., the partner of the late Mr. A. H. Allen, and one of the partners in the practice now carried on by "Alfred H. Allen and Partners," has been appointed borough analyst by the Chesterfield Town Council.

The many friends of Mr. J. T. Appleton, of the Walkley pharmacy, were glad to find him putting in an appearance at the various Conference functions, as he has been dangerously ill, and has only just returned from a holiday taken for the purposes of recuperation. His bronzed appearance did away with any question as to his complete recovery.

The minutes of the Highway Committee adopted at the last meeting of the City Council contained quite a number of sanctions to plans affecting local pharmacies. Among these were plans of alterations to the premises of Mr. F. Medley, at the corner of Chatham Street and Bridgehouses, additions to the paint and colour manufactory of Mr. J. T. Dobb, chemist and druggist, in Spring Street and Love Street, and the plans of Messrs. Boots' new shop at the corner of Chapel Street and Attercliffe Road.

#### Birmingham Notes.

Dr. Reginald Buller, Assistant Professor of Botany at the Birmingham University, has been appointed to the professorate of botany at the University of Manitoba.

Mr. G. H. Chance has given 1,000*l.* to the West Bromwich District Hospital; Messrs. Chance & Hunt have given 500*l.*, Messrs. Albright & Wilson 250*l.*, and Sir Ernest Spencer has been appointed President of the institution.

Boots (Limited) are very unfortunate in the matter of their window-glass. The mirror at the bottom of their right-hand window (which generally contains toilet-articles) has again been smashed irrevocably.

The Birmingham Corporation, under the direction of the Medical Officer of Health and his assistants and lady health inspectors, are inculcating habits of cleanliness among the poor folk of the city, and are giving away a modern form of feeding-bottle which is without the long

rubber tube—"a distinct menace under the best of circumstances," says the local report. It is pointed out that the authorities do not seek to enter into competition with purveyors of such utensils, but a feeling is getting abroad that it is not a wise practice, and that a better plan would be to give orders on local chemists to supply.

Our local pharmaceutico-barrister, in a letter to the "Post" concerning the manner in which the analyst's certificate is presented to the Bench in cases under the Food and Drugs Acts, calls attention to the unfair way adopted in such reports to magnify the enormity (?) of the offence. He instances a case where a farmer was fined 20*l.* for having "14 per cent. deficiency of solids not fat" in his milk, whereas it should have been stated 14/100 of 8.5 per cent., which brings the figures down to 7.31 per cent., a statement of less magnitude than the previous and most frequent method of expression. Mr. Marshall Freeman says the amount of fat was ignored altogether, and it might have been in excess of the minimum amount laid down.

#### The King's Business.

At an inquest before Mr. E. A. Gibson, Manchester City Coroner, on August 15, concerning the death of a man from oxalic-acid poisoning, Mr. Charles Edward Charlesworth, chemist and druggist, trading as "Wm. Mather," 219 Chester Road, had been warned to attend, but did not put in an appearance. The Coroner sent a police officer to bring him, and the jury were kept waiting until about four o'clock in the afternoon. After witness had taken the oath the Coroner asked him to explain his absence, and he stated that he had to see a gentleman connected with his own business. The Coroner: Do you think it is more important than the King's business?—No. Then why did you not attend?—It was an unfortunate mishap. I don't call it a mishap; it is something very near a contempt of court.—I hope not. You must learn to attend this court when summoned to it. Your explanation is not satisfactory. Mr. Charlesworth: I had to see a gentleman with respect to the sale of some arsenic. The Coroner: It was not more serious than a summons to attend this court. I represent the King at these inquests, and I expect any witnesses to attend, and if they neglect to attend they do so at their own peril. I cannot have the business of this court delayed to suit a person's private business. The witness was then questioned about the sale of the oxalic acid, and said he sold it on Saturday night to a poorly dressed labouring man, who said he wanted it to clean brass with. He would swear it was not the deceased who came for it. Mr. Charlesworth said he had diluted the acid. He was a qualified chemist, and had properly labelled the acid. He was satisfied the purchaser knew the nature of the poison. The Coroner said the only explanation was that the deceased had got someone to get the oxalic acid for him. He did not consider Mr. Charlesworth's explanation [of his non-attendance] satisfactory. He could either fine him or send him to prison, but he had decided to take no further steps. He would be merciful, but he wished the witness to understand that he must not neglect a summons from that court in future. He should disallow his expenses.

#### Co-ops. and Proprietaries.

At a meeting of the Halifax Grocers' Association on August 15, the Secretary reported that on the instructions of the Executive he had written to Messrs. Lever Brothers respecting the retail price of "Vim"—a new proprietary of theirs—and the arrangements or agreements with co-operative or bonus-giving stores. The Secretary pointed out how the question affects especially the small and medium-class grocers, and asked Messrs. Lever Brothers to send a request for co-ops. and bonus-giving stores to sell at a minimum price to be equivalent to the 3*d.* retail price inclusive of the bonus—i.e., 3½*d.* at least. Messrs. Lever Brothers replied that it is a condition of sale for all their goods that they are not to be sold wholesale or retail below the minimum prices stated in their price-list. The minimum retail price of "Vim" is 3*d.* for all dealers alike, whether private grocers or co-operative stores. They believe a large number of co-operative stores will sell "Vim" at 3½*d.*, but they could not insist on them selling at more than 3*d.* The Secretary remarked that the reply of the firm was rather vague, and did not help them as much as



they would have liked. Several speakers remarked that it was no use hoping to succeed unless they were all united; the makers of proprietary articles knew they were not united. All grocers' and chemists' associations should work together on questions affecting proprietary articles, and when the manufacturers saw they could present a firm front they would give way, but not before.

#### Poor-law Notes.

Mr. J. Metcalf has been appointed dispenser to the Guardians of the parish of Hammersmith.

The Edmonton Board of Guardians, at their last meeting, received a communication from the Local Government Board sanctioning the increase of the salary of Nurse Clark, but refusing to acknowledge her as a qualified dispenser of medicine—the ground upon which the advance was given. The medical officer reported that the necessary arrangements had been made to meet the views of the Local Government Board. In the course of discussion, it was stated that Nurse Clark was still dispensing, and not the assistant medical officer, and the matter was referred back to the Edmonton House Committee.

A correspondent writing to the "Local Government Chronicle" states that the Guardians of a union, under contract with their medical officers, agree to pay the cost price of certain expensive drugs. The Guardians appoint the chemist from whom such drugs shall be ordered. The drugs supplied during the three months ended March 25, 1904, are not yet paid for. When, he asks, does a running account of this nature become overdue? As the account was not paid within three months of March 25, is it now statute-barred? The answer given to the querist is of interest to all chemists who supply drugs under similar conditions. It is that the account is now out of date, and can only be paid if an order is obtained from the Local Government Board extending the time for payment. Such accounts become due at the end of each half-year.

At the South Shields Board of Guardians' meeting, on July 28, the House Revision Committee recommended the acceptance of the resignation of Dr. Forsyth as resident assistant medical officer at the workhouse, and that the vacancy be advertised for single medical men at a salary of 150*l.* per annum, together with rations, residence, washing, and attendance. It was explained that the present medical officer had 200*l.* a year, but he objected to the dispensing, which occupied about three hours of his time every morning. The committee, therefore, came to the conclusion that it would be better to reduce the salary to 150*l.*, and to appoint a dispenser at 30*l.* per annum. The Rev. D. A. Spence said that at Gateshead the doctor did the dispensing himself. He thought 200*l.* a year and to dispense was a fair thing. He did not think they should separate the duties, and moved an amendment that the salary be 200*l.*, the doctor to do the dispensing. Mr. Connor seconded, and the amendment was carried.

#### The Week's Poisonings.

Fourteen deaths—all suicides—by poisoning occurred during the week, carbolic acid being taken in six cases. The carbolic victims were Samuel Foster, of Salford; Ann Hall, of Kirkbythore; William Henry Morris, of Warrington; Susannah Sparrow, of North Ormesby; Mary Smith, of Market Harborough; and a farmer's wife at Lancaster. The woman Smith apparently first took morphine and then carbolic acid. At the inquest on the Lancaster woman the evidence showed that deceased had bought a bottle of carbolic acid from Messrs. Lund & Co., chemists, Lancaster, and in a fit of despondency drank a fatal dose. Dr. Stevens, of Lancaster (the medical man called in), said he considered carbolic was a most dangerous poison and ought to be scheduled. The Coroner (Mr. Holden) commented very strongly upon the fact that carbolic was sold by druggists and grocers as a disinfectant without being signed for as a poison. Anybody could go and buy a hog'shead, he said, just as easy as they could buy a pound of butter. He thought the State should cause carbolic acid to be placed amongst the scheduled poisons.—Laudanum caused four deaths. Dr. Browne (26), who has been staying at Dover with his uncle Dr. Burns, was found dead in a meadow. At the inquest it was stated that he had taken about 9 oz. of laudanum, which he had obtained from Dr. Burns's surgery.—An old labourer at

Wakefield, named Richard Midgley, was found dead in bed with an empty laudanum-bottle beside him; and a Yarmouth fried-fish merchant, Edward Hutchin, died at the hospital from laudanum-poisoning. Edward Maxwell Rodger (54), a commercial traveller, after buying 2 oz. of laudanum at one of Boots' shops in Manchester, went to the house of his son and took the poison, dying the same day. He had been a laudanum-drinker for five years, and for the last three years had purchased 2 oz. daily at Boots'.—At an inquest held before the Manchester City Coroner on August 15, it transpired that John Alfred Finch, a medical practitioner, of Collyhurst, had been found dead at the bottom of the staircase leading into his surgery. Deceased had obtained a 2-oz. bottle of hydrocyanic acid from Messrs. Woolley's, manufacturing chemists, and had taken about a tablespoonful in the surgery.—A printer's "locker-up," named William Pattison, committed suicide at Manchester with oxalic acid, obtained from Mr. Charles Edward Charlesworth, chemist, 219 Chester Road. A Chesterton clerk, Alfred Edward Graveling, poisoned himself with liquid ammonia. Susanna Ann Boothby, of Legbourne, near Louth, died on August 15, from the effects of taking a "handful" of sulphonal tablets.

## Irish News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

#### Carbolic Poisoning.

A woman named Mary Ann McKee was found dead near her home some miles outside Lisburn on August 6. The medical evidence at the inquest showed that she died from having taken a self-administered dose of carbolic acid.

#### Business Changes.

The old-established medical hall at 42 Queen Street, Nenagh, has lately been purchased from Mr. A. E. Pepper, pharmaceutical chemist, by Messrs. McAlinden & Co. Extensive alterations are to be carried out on the premises.

#### Dispenser's Salary.

At the meeting of the Mayo Infirmary Committee Mr. Daly objected to the payment of 1*l.* a week to a dispenser. He said the medicines cost roughly about 60*l.* a year, and they were paying a like sum almost for getting them compounded. He was of opinion this work should be done by the assistant resident doctor. No action was taken.

#### Refusing to Sell.

At the Coagh Petty Sessions, co. Tyrone, Constable Cooke summoned Terence Quin, under the Sale of Food and Drugs Acts, for having refused to sell him a tin of baking-powder for the purpose of analysis. The constable said he asked for an eightpenny tin, and tendered a shilling in payment, but the defendant declined to supply it. He was fined 2*s.* 6*d.* and costs.

#### Ginger-wine Cases Dropped.

At the last Petty Sessions Court in Coagh, co. Tyrone, a number of summonses were down for hearing against local traders, the charges being that they had sold ginger-wine which contained salicylic acid. When the cases were called the police withdrew the summonses on the ground that Sir Francis Brady, County Court Judge, has recently decided in favour of the defendants in appeal cases of a similar kind.

#### The Varying Average.

The average yearly cost of medicine in the various dispensaries of the Swinford Union for the past three years is as follows: Foxford dispensary, 35*l.*; Kilkelly, 17*l.* 8*s.*; Kiltanagh, 15*l.* 12*s.*; Lowpark, 26*l.* 15*s.*; Swinford, 24*l.*; and the workhouse, 38*l.* 17*s.* The average cost for the entire Union was 158*l.* 2*s.* 6*d.* The Clerk said in Kilkelly, with a population of 19,000, the cost for three years was 52*l.*; while in Foxford, with half that population, it was 104*l.*

#### A Projected Association.

A desire having been expressed by several pharmaceutical students in Dublin attending the classes in the Pharmaceutical Society's house, Lower Mount Street, that an association of a literary and scientific nature should be formed, Councillor Kelly, M.C.P.S.I., has been approached in the

matter, and he has kindly interested himself in the movement, which it is expected will be put into definite shape during the ensuing autumn.

#### Supply of Vaccine-lymph.

The shortage of vaccine-lymph at Armagh, where at present an epidemic of smallpox exists, came last week under notice in the House of Commons, in the form of a question as to the failure of the Local Government Board to provide an adequate supply of the lymph. The Chief Secretary denied that there had been any shortage, and said that 1,500 tubes had been supplied inside of four days, and that as many more would be sent if required.

#### Pointing the Way to Evasion.

Commenting on the recent prosecution of Coollanay traders by the Pharmaceutical Society of Ireland for the illegal sale of sheep-dip, the "Limerick Chronicle" says that although general traders may not stock and sell poisonous preparations, they can act as agents for the manufacturers by transmitting orders, leaving the latter to execute them by sending the stuff direct to the user. The pharmaceutical authorities would then be powerless to interfere.

#### Not the Contractor's Blame.

One of the medical officers of the Ballycastle Union has reported to the Local Government Board that the drug-contractor has forwarded medicines ordered at separate times and that occasionally invoices were not received in proper time. The clerk said the only case of the kind he knew was where medicines were sent in two packages, but the local stationmaster, who had the contract for sending them to the different dispensaries, only sent one parcel to the Ballycastle dispensary. The *Guardians* thought that that was the fault of the stationmaster, and not the contractor.

#### Payment of Analysts.

Sir Charles Cameron has written to the North Tipperary County Council requesting payment for his analyses of samples sent him by the inspectors of the Board of Agriculture. He said this was extra work, which was not contemplated at the time of his arrangement with the Council; and as each sample cost him 4s. for materials he hoped the Council would refund him 3/., his out-of-pocket expenses. Mr. Duggan stated that the analyst was already too highly paid. He thought matters would never be correct till county councils employed local analysts who would if necessary attend in court when prosecutions were being heard. The matter was referred to a committee for a report.

### Scotch News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

#### Fire.

A destructive fire broke out at the extensive soapworks of Messrs. Ogston & Tennant, at Aberdeen, on August 13, which spread to the neighbouring buildings and did damage estimated at 100,000/., before it was subdued. Blazing tallow and oil running in the streets created for a time a panic in the district.

#### Dundee Notes.

A one-year-old child at Dundee died suddenly after eating some ice-cream obtained from an Italian vendor's barrow. Dr. Gorrie, who was called in, attributed death to poisoning.

A woman named Conway had a narrow escape from poisoning at Dundee last week. She mixed a quantity of carbolic powder with some water, and drank it. A police-constable, who was called in, gave an emetic, and the woman was removed to the infirmary.

#### Bathing Fatality.

On August 12 Thomas King, chemist's assistant, residing at 71 Abbotsford Place, Glasgow, was drowned while bathing at Stonehaven. King was about twenty-one

years of age, and served his apprenticeship with Mr. T. Harley, chemist and druggist, High Street, Perth, and for some time acted as Mr. Harley's chief assistant. He had been in a situation in Glasgow for the past two years, and, with his mother and sisters, was spending his holiday at Stonehaven.

#### Glasgow Notes.

The local pharmacy schools have resumed work after the summer vacation, and students are said to be more numerous than ever.

In the West-end business is unprecedentedly quiet, and, indeed, all over the city the condition is best described as one of stagnation.

Mr. T. S. Barrie, Ph.C., has been displaying some of the botanical *spolia opima* of a recent holiday in Lancashire to the Andersonian Naturalists' Society.

In the photographic line the season has been a failure as regards the sale of cameras, but plates and papers have gone well. "End of the season" sales are now announced.

The chemist-students who are preparing for the qualifying examination of the British Optical Association are now in the throes of the final "flurry," as the fateful day is expected to be early in September.

By a fire which broke out early on the morning of the 13th inst. in the premises of the Albion Albuminising Company, 128 Sauchiehall Street, damage was done to the extent of 1,000/. This firm of photographic dealers have a large connection with local chemists, but they intimate that business will be carried on as usual.

### French News.

(From our Paris Correspondent.)

**PINAUD'S NOT FOR SALE.**—The rumour having gained credence that a group of capitalists is negotiating to purchase the perfumery-business well known under the title of Ed. Pinaud, 18 Place Vendôme, Paris, for the purpose of turning it into a company, I am informed that this is a false statement, as the business of Ed. Pinaud is not for sale, nor has the proprietor, M. Victor Klotz, any intention of turning the business into a company.

**HONOUR WHERE HONOUR IS DUE.**—The French "Official Journal" contained a decree last Sunday nominating Baron Henri de Rothschild as a Knight of the Legion of Honour. The announcement of this decoration has been very favourably received in Paris, in all circles, for the scientific researches and work of Dr. de Rothschild have been exceptionally extensive and useful. He has more especially directed his attention to questions relating to milk. In 1897 the Paris Academy of Medicine awarded him a gold medal for a treatise on artificial lactation, and he won a prize of the Faculty of Medicine in the following year. He is also the author of a number of works on questions relating to milk, and as the founder and chief physician of two dispensaries, one at Paris and one at the seaside, he has shown a keen and intelligent interest in the pharmacies attached to them. He is still only thirty-two years of age.

**POINTS IN FRENCH LAW.**—The tribunal at Nice recently decided a case under the French law which prohibits a medical man from receiving a legacy from a patient whom he has attended in the last illness. A German lady left a handsome legacy to her doctor, and he inherited that part which consisted of property in Germany, but the French Courts have decided that he cannot touch the French property. The same law would apply to a pharmacist here if he had in some measure taken the direction of the treatment of the deceased—i.e., acted as a doctor. The pharmacist, however, would not be disqualified from inheriting if he had merely supplied medicine. Another point of law worth notice is the recent case in which a pharmacist of Roubaix was attacked by the local medical syndicate for illegal practice of medicine. The pharmacist in an unwary moment had given treatment for several days consecutively to some workpeople who had met with an accident. He escaped with a nominal fine of 1/., and expenses, the action having been brought by the medical syndicate as a protest and caution to others. In France a pharmacist may give first aid, but he cannot legally continue a treatment.



THE LATE M. WALDECK-ROUSSEAU will be remembered with regret by many foreign pharmacists as one of the hospitable hosts who contributed to their entertainment at Paris during the 1900 International Pharmacy Congress. The French Premier invited representative members of this and other Congresses to a *soirée* at his then official residence, the Ministère de l'Intérieur, a certain number of tickets being placed at the disposal of pharmaceutical gress-men. M. and Mme. Waldeck-Rousseau greeted each guest (as he was announced at the entrance of the reception-room) with a shake of the hand, adding a few words of greeting when time permitted. I was much struck with the couple, their air of extreme refinement and complete affability. The entertainment took the form of an amusing *revue* by Coquelin cadet, Judic, etc., with dances by Spanish gitanas. After the theatrical performance and a pause at an excellent buffet, some of us adjourned to the cool garden for a quiet smoke, and it was carried by a large majority that the select *soirée* of the Minister was decidedly more enjoyable than the crush at the Elysée, at which we, like the Shah of Persia, had assisted.

## South African News.

(From our own Correspondents.)

**Note.**—THE CHEMIST AND DRUGGIST is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

SOUTH AFRICAN PHARMACEUTICAL ASSOCIATION.  
PHARMACEUTICAL SOCIETY OF CAPE COLONY.  
NATAL PHARMACEUTICAL SOCIETY.  
TRANSVAAL PHARMACEUTICAL SOCIETY.  
RHODESIA PHARMACEUTICAL SOCIETY.  
NORTHERN DISTRICT CHEMISTS' ASSOCIATION.  
PHARMACEUTICAL SOCIETY OF ORANGE RIVER COLONY.

### Natal.

OUR DURBAN CORRESPONDENT, writing on July 23, states that "the probable imposition of 15s. per proof gal. on imported tinctures, etc., has aroused keen opposition on the part of the local chemists, and a meeting is to be held next week to discuss the matter and to take steps to oppose the measure." (See *C. & D.*, August 13, page 299.)

THE USUAL QUARTERLY MEETING of the Natal Pharmacy Board took place at the Colonial Office in Maritzburg on July 14. There were present: Mr. G. A. Champion (President), Mr. C. A. Fawcett (Secretary), Mr. T. D. Charlton, Mr. S. K. Elgie, and Dr. Hyslop. Mr. J. E. Marchant, M.L.A., was unable to be present, owing to indisposition. The Secretary reported that an examination had been held that day, and that two candidates had passed and one failed. The two successful candidates were Messrs. Burton (Maritzburg) and Burnett (O.R.C.). Dr. Hyslop again brought up the question of counter-prescribing, on behalf of the Medical Council, and proposed a resolution dealing with the subject. After a lengthy discussion, it was resolved to arrange a meeting of the Medical Council and the Pharmacy Board at some date to be fixed in August, so that the subject could be fully dealt with. The Secretary announced that the Government had decided to issue a diploma to those candidates who had successfully passed the examination for chemists, and that it would be similar in style to the diploma given by the Pharmaceutical Society of Great Britain. The meeting was the last one of the regular quarterly meetings under the present constitution, the election of members for the new Board taking place some time before October next.

### Transvaal.

THE PHARMACY ORDINANCE.—The draft Medical, Dental, and Pharmacy Ordinance has passed through the Committee stage in the Transvaal Legislature, and the third reading was expected by the end of July. Writing on July 25, a Johannesburg correspondent states that information has leaked out that a member of the Legislative Council who owns a chemist's business in Pretoria would endeavour to get the word "managing" inserted before "directors" in Clause 37 of the Bill (see *C. & D.*, July 30, page 152). This, of course, would nullify the effect of the clause, so far as safeguarding the interests of qualified chemists is

concerned, so the following letter has been sent by the Transvaal Pharmaceutical Society to the Attorney-General (Sir Richard Solomon), who is in charge of the Bill:

SIR.—It having come to our knowledge that there may possibly be some opposition to Clause 37 as it now stands in the draft Ordinance, we beg respectfully to call your attention to the following facts. The clause as it now stands meets with the whole-hearted approval of every qualified chemist in the Transvaal—in fact, we may say of all South Africa—and is what the Pharmaceutical Society of Great Britain has been striving for for many years, and may procure at any time. Any modification may have most disastrous results and lead in the most simple manner to the complete evasion of the spirit of the Act—e.g., a number of people who are not chemists in any sense of the word form themselves into a company, secure the services of a young qualified chemist who is styled "managing director," and carry on the business of chemists and druggists. This individual is, in reality, only a paid servant and has practically no say in the management of the company's affairs. His qualifying shares are generally given to him, and are transferred to his successor when he is "retired," if he fails to give satisfaction to his employers, which not unfrequently happens. You will see that by this means unqualified persons trade as chemists and druggists, and so evade the law. Again, the same thing may happen when one unqualified director is permitted, through being the holder of nine-tenths of the shares in the company, to control the actions of his qualified fellow-directors. We regret troubling you so much, but feel that it would be most regrettable if what is generally acknowledged to be a most excellent piece of legislation should be spoiled by the action of one interested member. We feel sure that you will give the clause, as it now stands, your valuable support.

Four members of the Society interviewed Mr. Hull, M.L.C., a very clever lawyer, who promised his support, as also did Mr. Henry Solomon, Mr. Raith, Mr. Rensburg, and Sir George Farrar. In the Committee stage, on July 21, some slight amendments were made in various clauses. In Clause 51 (*g.r.*) the words "for which a charge of 1l. will be made" were struck out, and now apparently "the importer or general dealer" will not have to pay for his certificate to sell industrial poisons. In Clause 52 the word "agricultural" has been added, and the section now concludes "for mining, agricultural, or other industrial purposes."

THE SPIRIT-DUTY. — Messrs. Turner, Petersen, Dinwoodie, Butters, Lennon, Norman, and other chemists met on July 22 at Johannesburg to consider what steps should be taken to prevent the Transvaal Government from consenting to the imposition of 15s. per proof gal. on medicinal tinctures, etc. The meeting agreed to ask the Director of Customs to meet the importers named in order to discuss the subject at an early date. The Director consented to receive the deputation in Pretoria on July 26. Grapes are grown only in small quantities in the Transvaal, consequently a wine-distillery never existed there, and since the British occupation not one ounce of spirit has been manufactured in the Colony. If the new tariff is upheld by the whole Convention, the same tariff will be maintained by the Transvaal against Cape Colony, writes a Johannesburg correspondent, as will be enforced by the Cape Colony against Great Britain. This means that it will be much better, even then, for the Transvaal chemist to buy his spirituous preparations in London rather than in Cape Town.—Messrs. Lewis & Marks, of Eerste Fabriek, had a concession from the late Government for the sole manufacture of spirits, and they erected an elaborate modern plant and produced a good pure article. The present Government bought the concession from them, and immediately discontinued the manufacture. The Transvaal Assistant-Director of Customs recently stated that "it is not the intention of the Government to reopen this or any other spirit-factory, and, whatever the Customs Union may decide upon, the Transvaal will always impose a heavy tax on pure spirit entering this State, from neighbouring colonies or elsewhere, to maintain sobriety among the mine boys." British journals, continues our correspondent in quoting Dr. Hoffman's figures, seem to have overlooked the fact that more medicinal tinctures come to South Africa from Germany than from Great Britain. Although the Transvaal chemists are strongly opposed to the proposed tax, he concludes, they are

rather at a loss to see how the Chemical Section of the London Chamber of Commerce can with dignity interfere with this country's internal affairs. The Transvaal chemists are hoping they may be able to persuade Mr. Honey, the Director of Customs, to leave the matter in abeyance until the next meeting of the Customs Union, in July, 1905.

## Foreign News.

**EASTERN MOVEMENTS.**—Mr. Alfred Henry Mancell, lately secretary of A. S. Watson & Co. (Limited), of Hong-Kong, China, and Manila, has been appointed agent for the general managers of the company, and in that capacity will reside in Shanghai, with general charge of the company's interests at Shanghai, Hankow, Tientsin, and in North China. Mr. John Arthur Tarrant has been appointed acting secretary of the company.

**ARTIFICIAL FLAVOURING IN THE U.S.A.**—At a recent meeting of the Board of Trustees of the New York Fruit Exchange it was announced that an active crusade is to be begun against the sale of acids and so-called fruit-juices for the genuine extracts, particularly those used in the manufacture of spurious lemonade. The matter is to be put into the hands of investigators thoroughly familiar with the application of the State Pure-food Law, and each case brought up is to be pushed to the utmost extent.

**SUNDAY REST.**—The movement of self-help among Italian chemists to secure Sunday rest has been established in Padua. In that town there are twenty-four pharmacists, and they have agreed to close twelve establishments on alternate Sundays, beginning with the first Sunday in August. Thus every pharmacist in Padua, remarks the "Bollettino Chimico Farmaceutico" by reason of the solidarity of the trade, becomes assured of every alternate Sunday for repose without the aid of an Act of Parliament.

**GERMAN TARIFF INDEX ALTERATIONS.**—The following is a further list of alterations (in addition to those given in the *C. & D.* last week, page 345) which have been made in the official index governing the classification of articles under the German Customs tariff:

**Perfumed spirits**, or spirits suitable for use in perfumery (including the preparation of hair, mouth, and tooth washes), are dutiable under No. 31 (c) 1 of the Tariff at the rate of 300m. per 100 kilos. Alcoholic liquid ammonia, angelica spirit, lavender spirit, cochlearia spirit, bay rum, and spirit of soap of all kinds are included under this head.

**Tinctures.**—The term "alcoholic or ethereal tinctures for industrial and medicinal use" (dutiable at 20m. per 100 kilos.) includes only such alcoholic or ethereal extracts of parts of plants or animal matter, or chemical preparations, as are destined or adapted exclusively for medicinal use or for industrial purposes, such as for the purposes of perfumery. Alcoholic or ethereal tinctures that can be employed for edible purposes are dutiable as "spirits."

## Russian News.

**A SUBSIDISED SCHOOL.**—The Odessa Pharmaceutical Society have decided to open a school for pharmacists' assistants. It is proposed that it should be supported by subscriptions from owners of pharmacies, amounting to  $\frac{1}{10}$  kop. on every prescription and 1.50 r. monthly for every apprentice, beginning from the second year of apprenticeship.

**THE USE OF SACCHARIN.**—The Baku Government Medical Department announces that the adulteration of fruit-drinks is assuming large proportions. Special investigations have incidentally revealed that most of the ordinary village apothecaries obtain saccharin in very large quantities, and it is proposed to establish a severe supervision over the sale of saccharin, whilst the managers of pharmacies will only be allowed to take in a maximum of 100 grams of saccharin at any one time.

**RUSSIAN PLATINUM.**—The quantity of platinum mined in Russia in 1903 was a little under 6 tons (366 poods, against 374 poods in 1902). Only a trifling quantity was worked up into articles in Russia, the rest being sent abroad in its

natural or refined state; exactly one-half of it was shipped to the United Kingdom, against four-fifths in 1901. There is a continually increasing demand for platinum for the making of jewellery, chemical and assaying apparatus. At a recent meeting of the mineowners of Perm it was suggested that a syndicate should be formed to manufacture articles of platinum in the Ural.

**MORE BOTANY IN RUSSIA.**—In these days, when the study of botany is regarded as a questionable necessity, it is interesting to note that the medical faculty of Moscow have just increased the stringency of the botany examination for diplomas in pharmacy. Those who proceed to the assistants' examination must henceforth know more about plant physiology (Borodino's "Primer" is the text-book) and be able to identify the medicinal plants named in Barlixa's work on Russian medicinal plants. For the next higher diploma candidates will be expected to be familiar with all that there is in Strasburger's book, and for the Magister degree an intimate knowledge of the morphology and physiology of plants will be required, besides the plants dealt with in Kauffmann's "Flora of Moscow" or Maevsko's "Flora of Central Russia."

**MEDICINAL HERBS IN SOUTH RUSSIA.**—The Provincial Council of Karkoff are taking measures, says the "Novoe Vremya," to build a store for medicinal herbs for the supply of the neighbouring Governments of Kursk, Tchernigoff, Poltava, and Voronege as well as Karkoff. In the southern provinces some fifty different medicinal herbs grow, for the greater part wild. The peasants do not cultivate them, but gather them for sale to chemists and druggists. In the first half of the sixteenth century the Polish King Bona acclimatised and cultivated in the province now known as Podolia a large variety of medicinal herbs, which he ordered from Italy. In the course of time they spread throughout all Little Russia in the cultivated state, and afterwards wild. The object of the Council is to buy South Russian medicinal herbs and to organise the sale of these from their store.

## East Indian News.

MR. C. T. ROBBIE, pharmaceutical chemist, Allahabad, has opened a branch establishment at Naini Tal.

THE BUSINESS OF WILLETT & Co., chemists, &c., Kurseong, D. H. Ry., is in the market, Mr. Frank Willett, the proprietor, wishing to leave the country.

THE Simla correspondent of the "Madras Times" states that the Government of India have decided to admit, in future, free of duty, all trade catalogues and circulars imported into British India by packet, book, or parcel post.

**CEYLON CARDAMOMS.**—The Ceylon Cardamom Committee has adopted a resolution asking the Government to sanction a scheme placing a cess of 1c. per lb. on all exported cardamoms. It is not expected that the Government will raise any opposition to the proposal.

**ENCOURAGING NATIVE MEDICINES.**—The syndicate of the Punjab University (Lahore) have decided to increase the present grant of Rs. 50 per month to Rs. 250, on the recommendation of the Faculty of Oriental Learning, that the subject of indigenous medicines may be more thoroughly studied. In this connection the "Civil and Military Gazette" says that the Punjab University will have to reconsider before long their position in respect to native systems of medicine. At present the University spend about Rs. 50 in maintaining classes of the Ayurvedic and Yunani systems of medicine. In the Calendar a detailed syllabus of the examination for these classes is given, but no examinations have been held now for over ten years. At a meeting of the Faculty of Oriental Learning the other day, it was resolved that the indigenous medicine classes be continued and Rs. 250 per mensem apportioned for them, and the services of physicians of repute and eminence acquired. The matter having been referred also to the Faculty of Medicine for opinion, the latter decided that the systems of medicine referred to consist in the main of the administration of nostrums and secret remedies without any scientific basis, and the allotment of the proposed grant would be a waste of public funds. The question will come up before the Syndicate immediately.



## Association Ballads.

### THE PURPOSE.

*The men, their aims, their daily irk;  
Their troubles, trials, thoughts, and views  
On things politic, foes that lurk  
In friendly guise, but treach'rous work—  
These be the burden of our Muse.*

### XXXII.—HARROGATE.

SUN on the Harlow Hill,  
Bird on the wing,  
Strollers by Moor and rill,  
Drink at the Spring,  
Seeking salubrity,  
Dodging grim Fate,  
Shunning lugubricity,  
Gay Harrogate!

Some like the "Tewit,"  
Others "St. John's,"  
Weigh well (or rue it)  
The pros and the cons;  
"Bog" or "Montpelier,"  
Which would ye drink?  
Just as you feel your  
Illnesses shrink.

Harrogate pharmacist  
(Eynon their chief)  
In storm or calm assist,  
Brethren's relief;  
Meet at the "Salisbury,"  
Tell of their needs,  
Speak well of Halsbury,  
Branson of Leeds.

Handford, the handy-man,  
Shakes the dry bones.  
Says, "We must bandy, man,  
Words with Glyn-Jones."  
Thus the Disloyal Ono  
Meekly unbends,  
Looks in to see the fun,  
Makes many friends.

So when young pedagogues,  
Thirsting for fame,  
Start out to set a vogue  
Yorkshire's aflame;  
Boldness and learning, too,  
More than you'd guess,  
Missive of yearning to  
Pilkington S.

Moon on the Harlow Hill  
Soft shadow flings;  
Cult of the Varnished Pill  
Softly he sings  
Brethren of Harrogate,  
Guarding the Spa,  
Greetings we dedicate  
From near and far.

## Summer Outings.

### CHEMICAL-MAKERS PICNIC.

The employés at the works of Messrs. T. Morson & Son, at Summerfield Works, Ponder's End, N., had their annual outing on August 13. Welwyn, which was the place visited, was reached after a drive of about twenty miles through some of the finest scenery in Hertfordshire. A substantial dinner having been partaken of, the "Health and Prosperity of the Firm" was proposed and responded to, after which the afternoon was spent in cricket, etc. The return journey was made about 7 P.M., the outing being a great success.

### "SPARKLETS" AT SEA.

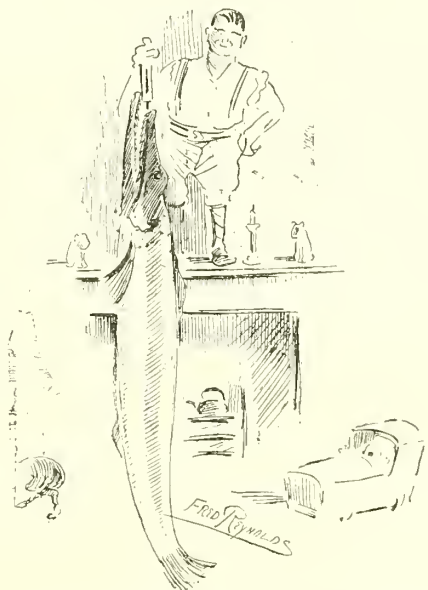
The annual outing of the staff and employés of Aërotors (Limited), of Edmonton, the proprietors of the "Sparklet" specialities, was held at Southend on August 12. During the morning a programme of sports was carried out on the

Marine Park grounds, the different events being keenly contested. Dinner was served at the Hôtel Métropole, where some 115 members and guests sat down, under the chairmanship of Mr. A. J. Campbell, managing director and general manager of the company. Various toasts followed, that of "Sparklets" being enthusiastically pledged by all present. The speeches were agreeably interspersed by songs, capitally rendered by various members of the party, and during the proceedings the prizes were distributed to the winners of the morning's races. The party returned to town in the evening, having by common consent had a most successful and enjoyable day's outing.

### A TRIP TO GRIMSTHORPE CASTLE.

On August 11 the members of the Peterborough and District Chemists' Association paid a visit to Grimsthorpe Castle, the Lincolnshire seat of the Earl of Ancaster. The company met at Bourne, and included the President (Mr. Prior, Stamford), Mr., Mrs., and Miss Farr, Mr. and Mrs. Pearson, Mr. Girling, Miss Holland, Messrs. Baxter, Hales, E. Swallow, Hurley, Clarabut, and the Secretaries, Messrs. Saunders and Hall. Rain had fallen all the morning, but at 2.30, when a start was made, the weather cleared up. After spending the afternoon at the Castle, an adjournment was made to the Black Horse, where an excellent dinner was followed by the usual complimentary toasts. On the return journey a call was made at Edenham Church, and at Bourne Mr. Baxter conducted the party over the Abbey church, the site of the Saxon Castle which was the scene of many of the exploits of "Hereward the Wake," and St. Peter's Pool, which first induced the Saxons to make Bourne a place of encampment.

### FROM THE LAKE DISTRICT.



We are here fishing and having a glorious time, practically living in a boat. I caught a 19½ lb. pike by trolling. The lake was noticed to go down 1 foot. I got the landlord to weigh my catch, and it was so big he had to stand on the mantel-piece to do so. If you don't believe me, I have a dozen witnesses.

F. R.

AT CAPE TOWN on July 21, Arthur Henry Wragg was fined 1l. for selling two dozen iron pills deficient in strength to the extent of 64 per cent of ferrous carbonate.

A CABLE from Johannesburg dated August 16 states that an important discovery of gypsum is reported to have been made at Fauresmith.

THE NEW DICTIONARY—A LA BOOTS.—Chemist, a shopkeeper who vends stationery, electro-plated articles, cheap jewellery, baking-powder, and Chinese crackers. As a side-line he prepares and sells drugs for medicinal purposes.—*Illustrated Bits.*

## Sheffield Sparklettes.

Our account of the doings at the Sheffield meeting of the British Pharmaceutical Conference finished last week at mid-day on Thursday. Luncheon was taken at the Peacock Inn at Baslow, a large marquée having been erected in the grounds. Everybody seems to have been pleased with the catering arrangements, and the geniality of the waiters at the time of the greatest pressure was universally remarked. After luncheon Mr. G. T. W. Newsholme (Chairman of the Local Committee) gave the loyal toast, and afterwards proposed "Success to the British Pharmaceutical Conference," which was responded to by Mr. W. A. H. Naylor, the new President. Mr. T. H. W. Idris, the retiring President, in a humorous speech, proposed the toast of "The Local Committee," to which short replies were given by Messrs. H. Antcliffe, G. T. W. Newsholme, G. Squire, and Councillor A. R. Fox. Mr. W. F. Wells (Dublin) proposed "The health of the Ladies," and Mr. J. Davy Turney (Plymouth) replied on their behalf.

The drive was then resumed, permission having been given to the party to drive through Chatsworth Park, where another view was obtained of Chatsworth and the hunting-tower. The park drive finishes at Becey, where edge-runners and grind-stones are made. At the neighbouring railway-station the stones were awaiting distribution to all parts of the Kingdom. Passing through Rowsley, a short drive brought the party to Haddon Hall, the *chef-d'œuvre* of the day's excursion.

The party were admitted in twenties, and (writes a correspondent) "many a quip and crank was exchanged as outside the massive portal we waited our turn to pass through the narrow wicket. Inside we passed to the chapel, with its blending of Norman, Early English, and Perpendicular, to the kitchen, the banqueting-hall, with the 'high' table still *in situ*, the ball-room, drawing-room, and state bedroom. It was as though we were living in the sixteenth century, the excellent preservation and tender care bestowed on the decorations heightening the effect."

In the state bedroom the ladies (and some of the gentlemen) stayed to gaze in Queen Elizabeth's looking-glass and (according to the legend) remain good-looking for the rest of their lives. The garden was reached by the doorway through which Dorothy Vernon eloped, and on the famous steps a group of the Conference was taken. A little delay was caused by the difficulty in dodging the sun, but the delay was quite justified by the excellent results which Mr. Henderson, the eminently patient and good-natured photographer, obtained.

Once more the coaches were filled, and the drive back to Baslow through Bakewell commenced. The time-table of the excursion had been encroached on to such an extent that it was not found possible to halt at Bakewell, but some of the busy ones silently sought the railway-station so as to be back at work on the Friday morning. Back at Baslow once more amid the ringing of the church-bells (there had been a grand wedding during the day), "high tea" was served in the marquée. After tea the members wandered through the village, purchasing picture postcards as souvenirs. At eight o'clock the return journey was commenced, the hotels being reached at ten.

The distinct autumnal feeling in the evening caused many of those who had delighted in riding on the front seats on the outward journey to seek the shelter of the interior of the coaches for the return drive. It was not, however, altogether a cause for regret, as impromptu concerts seemed to be taking place, in which "songs of the eventide" predominated.

The group photograph which is reproduced on page 359 is one of those taken on the steps of Haddon Hall. The original photograph is 15 inches by 12 inches, and is mounted on a board 23 inches by 17 inches. The photographer, Mr. R. S. Henderson, 229 Glossop Road, Sheffield, is supplying copies at 3s. each.

The day did not pass without mishaps, but these were fortunately not of a serious nature. Shortly after starting from the Royal Victoria Hotel in the morning the carriage containing the Secretary of the Local Committee (Mr. Antcliffe) came to grief owing to a broken axle. Later in the day, as the coaches were passing through Rowsley, a pony attached to a small cart, containing ladies and children, became restive, and when passing the third coach the wheels of the pony-cart and coach touched. This increased the restiveness of the pony, and caused the cart to swerve violently on to the kerb, with the result that a wheel was smashed. It

seemed as though a serious accident must have happened, but through the presence of mind of one of the ladies in the pony-cart, and the willing helpers who swarmed down from the coaches, all danger was over in a few seconds. During the break in the journey at Fox House, one of Mr. Newsholme's daughters had the misfortune to sprain her ankle, but even the fact that she had to limp about for the remainder of the afternoon with the aid of a stick did not prevent her having a good time.

The souvenir of the Conference, in the shape of a tiny mortar and pestle, which the Sheffield Local Committee are presenting to each visitor to the Conference is not yet ready, and it is not expected that the whole supply will be completed before the expiration of a fortnight or so. Conferencites will perhaps note this, and so save themselves the trouble of unnecessarily worrying the patient Hon. Secretary, who is taking, at the end of this week, the holiday which it will be generally conceded he has well earned.

The members of the Local Committee have been going about this week trying hard not to look relieved. The Hon. Secretary frankly owns to feeling "lonely," and his colleagues are evidently experiencing the relief from the responsibility which has rested on them lately, not only in their waking hours, but also, according to Mr. Newsholme, in the hours which should have been devoted to sleep.

Some of the visitors during Conference-week may have noticed the air of sprightliness surrounding some of the local pharmacies. There is perhaps no harm now in confessing that in some instances the event had been preceded by a vigorous "spring cleaning," and in one or two cases the painters had been at work trimming up the establishment in honour of the visit. Mr. J. F. Eardley has been having a new front put in at his Glossop Road premises, and special efforts had been made to have the work completed in time, the new alterations giving the shop a very handsome appearance.

"The Lady" of August 13 has a few notes on the dresses worn by the ladies at the reception at the Town Hall on August 8, from which we take the following: Mrs. Newsholme, who was wearing black Chantilly lace over white taffetas, was accompanied by the three Misses Newsholme, who wore white silk dresses, appliqué with creamy white lace guipure. Mrs. Percy Carr, in white tulle, with silver embroideries over white taffetas, had a trail of crimson roses carried across the right shoulder. . . . At the dance on Tuesday evening at the Royal Victoria Hotel there were about two hundred and fifty guests. Mrs. Antcliffe was gowned in white chiffon, inserted with lace; Miss Forsdike was wearing pale pink mousseline de soie; Miss Fox looked very pretty in pale blue silk broché, with *motifs* of black velvet ribbon in trellis-work design edged round with cream lace guipure; Mrs. Glyn Jones (London) had a smart frock of stone-coloured crêpe de chine, inserted with ivory guipure, and brightened by touches of coral-pink panne; Mrs. Gilbert Jackson wore palest green satin with a spotted net overgown appliqué, with wavy lines of black Chantilly lace, and black velvet ribbon; Mrs. Percy Carr had an artistic toilette of palest green chiffon over pale rose-pink taffetas, and there was a chic touch of black in her shoulder-strap of pink roses; Miss Parkin wore a smart frock of black soie de chine; and Miss Mary Parkin was gowned in white crêpe de chine and chiffon, the bodice fashioned *en bolero*. Miss Blow (Newcastle-on-Tyne) had a dainty dress of white muslin, with a garniture of scarlet flowers, Mrs. Blamey (Brighton) was in pale blue silk *en appliqué*, with silken embroideries, the skirt trimmed with many small frills, and Mrs. A. Francis wore black taffetas, with an overgown of appliqué Russian net, which had a deep berthe of white Carrickmacross lace decorating the corsage.

## Gazette.

### Partnerships Dissolved.

**Maclean, M. S., and McNeill, J. L.,** under the style of Maclean & McNeill, Wolverhampton, physicians, etc.  
**Welchman, E. W., and Fraser, J. S.,** under the style of Mr. Eliot Welchman and Dr. Fraser, Lichfield, physicians, etc.

### The Bankruptcy Acts, 1883 and 1890.

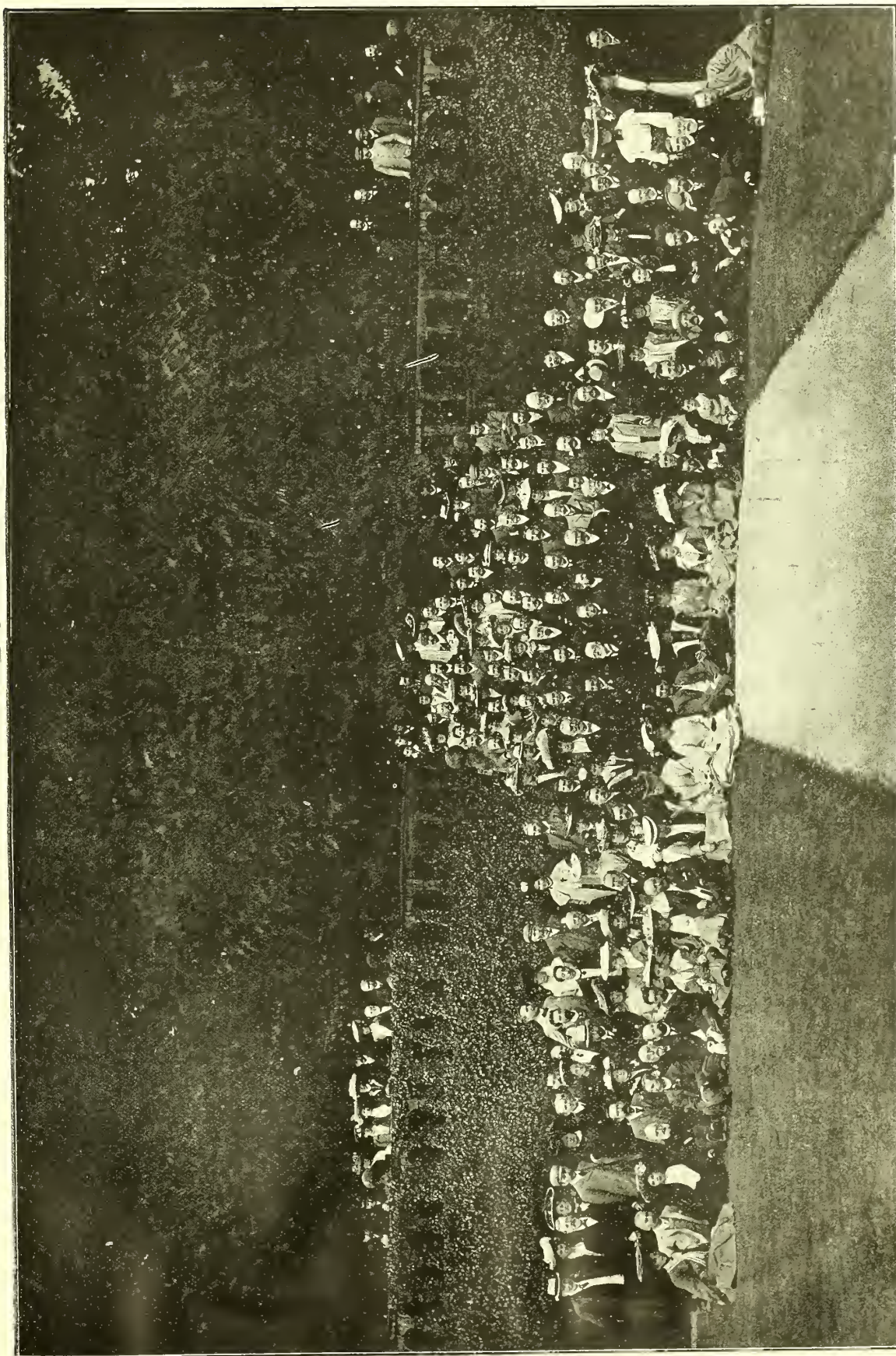
#### ADJUDICATION.

**Hulland, James,** Framlingham, Suffolk, chemist.

#### DIVIDEND DECLARED.

**Vincent, J.,** 85 Haverstock Hill, chemist: supplemental dividend of 9d. any day (except Saturday), at Bankruptcy Buildings, Carey Street, W.C.





The British Pharmaceutical Conference at Haddon Hall, August 11, 1904



## Trade Notes.

**TABLOID GLYCEROPHOSPHATES.**—Messrs. Burroughs Wellcome & Co., Snow Hill Buildings, E.C., have placed on the market tabloid glycerophosphates compound as a substitute for the syrup, over which it possesses some advantages. Each "Tabloid" contains the combined glycerophosphates of calcium, sodium, potassium, magnesium, and iron, with pepsin, diastase, *ignatia amara*, and kola equivalent to half a fluid drachm of syrup of glycerophosphates.

**"GEKA" CHEMICALS.**—These photographic goods, for which Messrs. A. E. Staley & Co., 19 Thavies Inn, Holborn Circus, E.C., are the agents, are now ready for delivery, and a general price-list is ready. To make these goods known to photographic chemists, arrangements have been made to supply, post free for 5s. 6d., a case containing a tube of each of the following articles: Diophene Geka developer, Carcinol Geka developer, Pyrogallol Geka developer, Daylight Geka developer, Film Geka developer, Hydrokinone Geka developer, Brilliant Geka developer, Corophane Geka developer, Uranium Geka intensifier, Persulphate of Ammonium reducer, Combined Anti-hypo hardening cartridge, Vesta flashlight-powder, Geka flashlight-powder, Platinum Geka toning-bath, Geka acid fixing-bath, Geka gold combined toning and fixing bath, Geka encaustic paste to give brilliancy to dull points, Geka Amylin mountant, 3 flash candles (2 seconds), strip of touch-paper for flash-powders. The powder developers named are enough to make about 8 oz. of solution. We have examined the samples sent us, and hope to make practical trials at an early date. A nice showcard illustrating chromatic toning with the "Geka" compounds is also being issued to dealers.

## Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

MR. W. F. CHARLES, chemist and druggist and perfumer, of Loughborough, has removed from Market Place to Baxter Gate.

MR. E. WARD has purchased Smart's Pure Drug Company, 256 Well Street, Hackney, and will carry it on under the same name.

MR. J. BELL, of Byfleet, has purchased the business of Mr. F. G. Deacon, chemist and druggist, at 50 Victoria Road N., Southsea, which he will carry on under the style of "J. Bell & Co."

MESSRS. W. FLETCHER & SONS, wholesale druggists and driersalters, of Dale Street, Shipley, Yorks, have put down a large plant for the manufacture of glass bottles of all kinds used by them in their business.

## Personalities.

We understand that Mr. Thomson, of Messrs. Thomson & Davidson, chemists, of Roodepoort, Transvaal, is now in this country. Probably some subscriber can oblige us with his address, as we have a communication for him.

DR. WILLIAM OSLER, D.Sc., F.R.S., late Professor of Medicine at the Johns Hopkins University, Baltimore, has been appointed Regius Professor of Medicine at the University of Oxford, in succession to Sir John Burdon-Sanderson, Bart.

MR. ALBERT LARKING, Assistant Secretary of the Early-closing Association, is not only interested in securing shorter hours for shop-assistants, but is a great advocate of open spaces, and as Hon. Secretary of the Brockwell Park Extension Scheme did a great deal towards securing the forty-three acres recently added to Brockwell Park. On Saturday afternoon he was present, with the Mayor of Lambeth and Mr. W. B. Doubleday, of Godliman Street, at the unveiling of the memorial fountain to the late Alderman Candler erected at the Water Lane entrance to the park.

M. DERNEVILLE, who represents Belgium as Commissary-General at the International Exposition of Hygiene, etc.,

at Paris (and who in that capacity proposed the health of M. Loubet at the inaugural banquet), is of course the well-known Brussels pharmacist. Delegate at the 1900 International Pharmacy Congress at Paris, and at the recent Centenary of the Paris Society of Pharmacy, few foreign pharmacists are better known in France than the genial and erudite President of the Royal Society of Pharmacists of Brussels. The name of M. Van Hulst (who attended the same banquet as delegate of the Belgian Ministry of Agriculture) will also be familiar to pharmacists the world over as that of the indefatigable Secretary of the International Conference for the Unification of the Dosage of Potent Remedies, the body which, a year or two ago, laid the foundation of the International Pharmacopœia.

## Marriages.

HAMBLEN—MARSH.—On August 16 at Wynne Road Baptist Church, Brixton, S.W., by the Rev. Z. T. Downen, D.D., Richard Ruthven Painter Hamblen, chemist and druggist, of 57 Brixton Road, S.W., to Edith Spurrell, eldest daughter of the late Mr. Sydney Marsh, of Brixton.

POWER—BEECH.—At King's Heath, Birmingham, on August 9, O. C. Power to Evelyn Maud, fourth daughter of Mr. Thomas Beech, chemist and druggist, King's Heath.

## Deaths.

BALLS.—On August 8, Mr. Thomas Crow Balls, chemist and druggist, of 261 Southampton Street, Camberwell, S.E., aged sixty-nine.

CHURCHILL.—At 141 Ashburnham Road, Hastings, on August 12, Mr. Walter John Churchill, pharmaceutical chemist. Mr. Churchill was a well-known Birmingham pharmacist, being a son of Mr. Churchill, the inventor of the once far-famed "Pâte de Lichen." He was for many years a partner in the firm of Arblaster & Churchill, of Birmingham. In May, 1877, he was elected to the Council of the Pharmaceutical Society, and retired in 1886. He was also a member of the old Trade Association Executive of Birmingham. For many years he conducted the Preliminary examinations of the Pharmaceutical Society when Birmingham was one of the centres. He was a good pharmacist and a gentleman of cultured, scientific attainments.

LEA.—At Romsey, Hants, on August 11, Mr. Richard Lea, chemist and druggist, aged eighty-six. Mr. Lea had been in business at Romsey for many years.

SHAW.—At 71 Whitmore Road, Small Heath, on August 12, Mr. George Shaw, late professor of chemistry at Queen's College, Birmingham, aged eighty-seven. Mr. Shaw was at one time chemist to Messrs. Chance & Hunt, and was a great friend of Sir James Chance, the maker of lighthouse lenses. During his long career Mr. Shaw occupied many positions in scientific societies and, latterly, was much interested in patents and patent law. In conjunction with the late Mr. Alfred Bird, an analyst and pharmacist of repute in his day, Mr. Shaw investigated various scientific problems which were the subject of legal proceedings in the early period of the workings of Adulteration Acts. He was a teacher of science for love of the work, and at the Midland Institute at Newhall Street he instilled scientific methods into the minds of chemists and pharmacists during the evenings when facilities for study were not so great as they are nowadays. In 1844 he published "A Manual of Electro-metallurgy."

THE AGITATION in South Africa against the monopoly of the Crown Agents in the purchase of stores has resulted a substantial concession by the Government. In answer to Earl Grey in the House of Lords on August 11, the Duke of Marlborough said that in future the South African Governments will be empowered to ask for tenders for stores locally as well as through the Crown Agents. The tenders would be issued simultaneously, and it is hoped that the new system will give the local merchants every opportunity of showing whether they can compete on as favourable terms as the merchants at home had hitherto done through the Crown Agents.



## Observations and Reflections.

By XRAYSER.

### Mr. Idris's Address

as President of the British Pharmaceutical Conference is notable for its political sections. As a pharmacist, as the chairman of a company carrying on a large business—a business to which the joint-stock principle is perfectly applicable—as a man well experienced in public life, and especially as a prospective member of Parliament, Mr. Idris's clear and uncompromising demonstration of the reasonableness of present pharmaceutical claims is both opportune and encouraging. If we are only to have one chemist in the next Parliament, it will be satisfactory to have one so sympathetic towards our formulated legislative aims, and with concluded convictions as to their justice. One chemist, I said. But there is one there already, from Belfast, and if Mr. Idris and Sir James Haslett, backed by the Pharmaceutical Societies of Great Britain and of Ireland, could join hands, they might soon form a compact little party, and our prospects would be getting really rosy. What is the Irish Society doing in this direction? A committee was appointed and met in February last, and promised to report the next month. Since then nothing more has been heard from it.

### The Seventy Guineas

hush-money which the Pharmaceutical Society is to pay to the Pharmaceutical Conference may be a good bargain for the Society or for the Conference—and, indeed, it may be what our ancestors would have called “a good cheap” for both. The Society wants the goods and the Conference wants the cash. True trading is always mutual accommodation. It is not an essential feature of commerce, as is sometimes assumed, that one party or the other must be injured. If there was a victim in this case it was the Pharmaceutical Society. When the two Presidents took a cup of tea together and agreed to strike a mean between fifty pounds and seventy-five pounds the Conference plenipotentiary, who has bought and sold a good many horses in his time, suggested 73*l.* 10*s.* as about hitting that mark, and, having no arithmetic-book in his pocket, the Society President accepted his friend's arithmetic. Perhaps Mr. Idris promised to throw in a ten-guinea advertisement, and if so it must be admitted that he well kept his word. We all want to see that “Compendium” now. But it was scarcely graceful on the part of the Society apologists to flaunt their liberality in giving anything at all to their poor relation. Take the money or leave it, they said; we shall appropriate your work whether we pay for it or not. No doubt they would; other compilers do the same; but there is a pleasant way and a rough way of relieving a man of his property. “Plumer la poule sans la faire crier”; pluck the feathers from the fowl without hurting it, is the artistic method.

### Mr. Dobbs

scored a success once in a Pharmacy Act case, and this apparently tempted him to seek glory and income as the professional rescuer of oppressed unauthorised poisonmongers. But this modern Lancelot will have to arm himself with better weapons than those he flourished at the Mansion House last week if the Ballykinrain flag is to prove victorious. His comic objections and fantastic defences, raised on behalf of an ironmonger company who had sold a nicotine insecticide without any of the prescribed precautions, were only tolerated because they were put forward by a solicitor. He did not dispute that the

stuff sold was a deadly poison, but he solemnly assured the Lord Mayor that the Act was only intended to apply to poisons sold for medicinal purposes; he contended that the House of Lords decision had exonerated companies from compliance with the 17th as well as the 15th section, and he dwelt on the cruel interference with the liberties of Englishmen when the Pharmaceutical Society's spy was sent to buy the article from his innocent clients without first explaining to them that they would be prosecuted if they sold it.

### The Spy Theory

may have had some little influence on the Lord Mayor, who without an atom of evidence testified to the innocence of the defendants, though they were actually insisting before him, through their representative, on their legal right to sell poisons without even labelling them. But why do the Society's agents so invariably repudiate their description as spies? They only play the cross-examiner's own game by apparently recognising that there is something discreditable about their action. A simple admission that they were spies would be both truthful and tactful. According to the Hague War Convention “a spy is one who, acting clandestinely, or on false pretences, obtains, or seeks to obtain, information in the zone of operations of a belligerent, with the intention of communicating it to the hostile party.” If law is to be enforced, the spy is necessary, and his occupation, when pursued for legitimate purposes, honourable. In war the spy is often a hero. Major André, shot by Washington's orders as a spy, has a memorial in Westminster Abbey.

### Discretion in Dispensing

was brought to a practical issue in the Birmingham case, and I am not convinced that the defendant chemist quite got justice on that occasion. The Magistrates recognised that it was proper for a dispenser to exercise some discretion; but they held that in this case the chemist did not exercise enough, or perhaps that he exercised too much. They fined him 40*s.*, clearly because his discretion did not tally with theirs. He may have had sufficient or insufficient reason for reducing the dose of quinine from 10 grains to 1 grain; he may not have dealt with the customer in the wisest possible way; but once admit that he had a right to introduce his private judgment at all, the only question for the Bench, it seems to me, was whether he used that right in good faith or not.

### “Decimal or Metric System”

is an expression used by the President of the British Pharmaceutical Conference. Mr. Idris said he hoped that in the coming “Compendium” quantities would be stated in terms of a decimal or metric system. Later, Mr. Bird, who in his paper on the next Pharmacopœia had alluded to metric weights and measures, accepted Mr. Tyrer's suggestion that the term “decimal” was preferable to “metric.” The opinion of these experts appears to be that it is desirable to change our present system for a decimal one, but that it may be not desirable to adopt the metric system. The time for this pedantry has passed. It is too late to discuss whether the metric system is the most perfect conceivable. It is in actual use among the majority of European nations, and that is the only valid reason which can justify the enormous inconvenience to which we should have to submit in the event of any compulsory change.

### Mr. C. E. Pickering

sends me a prospectus of the Pharmacy Guild he is organising, and writes that he is trying to find out whether there is any *esprit de corps* left in pharmacy. “What is your opinion, ‘Xrayser’?” he asks. Simply that he will not find out in that way. Assistants are to pay 1*s.* for the privilege of pledging themselves never to accept service with unqualified companies. Even if the success of the scheme were much more probable than it is, it would be hardly chivalric to ask assistants to bear all the brunt of the battle, and for employers to reap the fruits of victory. An alliance of this kind was called in Latin *Leonina Societas*.

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## A Philosopher's Reflections.

MR. A. J. BALFOUR, freed from his Parliamentary duties, has this week addressed the British Association at Cambridge on "Reflections Suggested by the New Theory of Matter." It was thought that Mr. Balfour would have



something to say on Sir Norman Lockyer's recommendation last year of a grant of twenty-four millions towards scientific education, which has led to the formation of the British Science Guild, but discreet silence on this matter was wisely maintained. The first part of the address dealt with the illustrious line of physicists who have learned or taught at Cambridge, a line stretching from Newton in the seventeenth century, through Cavendish in the eighteenth, through Young, Stokes, and Maxwell in the nineteenth, through Kelvin, who embodies an epoch in himself, down to Rayleigh, Larmour, J. J. Thomson, and the scientific school centred in the Cavendish Laboratory, whose physical speculations bid fair to render the closing years of the old century and the opening years of the new as notable as the greatest which have preceded them. To refer to these physical conceptions as the discovery of the "laws connecting phenomena" is, Mr. Balfour said, inconvenient and confusing. Phenomena are things which appear, and the physicist seeks for something deeper than the laws connecting possible objects of experience. Physical reality exists as the unalterable faith of science, and science, as men of science usually conceive it, would perish with the loss of this faith under the assaults of critical speculation. The speaker then compared the different modes in which, at different epochs of scientific development, the conception of the physical universe was attempted. Beginning with the epoch of Newton, the average man of science probably regarded the physical universe as consisting of "various sorts of ponderable matter, scattered in different combinations through space, exhibiting most varied aspects under the influence of chemical affinity and temperature, but through every metamorphosis obedient to the laws of motion, always retaining its mass unchanged, and exercising at all distances a force of attraction on other material masses according to a simple law." Then came Young with the great controversy which finally established the undulatory theory of light, and with it a belief in an interstellar medium by which undulations could be conveyed. In the interval that has since elapsed the theory of the ether has been modified by such far-reaching discoveries as the atomic and molecular composition of matter, the kinetic theory of gases, and the laws of the conservation and dissipation of energy, but most of all by the important part which electricity and the ether occupy in any representation of ultimate physical reality. Two centuries ago electricity seemed but a scientific toy: it is now thought by many to constitute the reality of which matter is but the sensible expression. It is but a century ago that the title of an ether to a place among the constituents of the universe was authentically established: it now seems possible that it may be the stuff out of which that universe is wholly built. Mr. Balfour then took his hearers into the new region of the electric theory which analyses matter, whether molar or molecular, into something which is not matter at all.

The atom is now no more than the relatively vast theatre of operations in which minute monads perform their orderly evolutions; while the monads themselves are not regarded as units of matter, but as units of electricity; so that matter is not merely explained, but is explained away. Now, the point to which I desire to call attention is not to be sought in the great divergence between matter as thus conceived by the physicist and matter as the ordinary man supposes himself to know it, between matter as it is perceived and matter as it really is, but to the fact that the first of these two quite inconsistent views is wholly based on the second. This is surely something of a paradox. We claim to found all our scientific opinions on experience; and the experience on which we found our theories of the physical universe is our *sense-perception* of that universe. That is experience; and in this region of belief there is no other. Yet the conclusions which thus profess to be entirely founded upon experience are to all appearance funda-

mentally opposed to it; our knowledge of reality is based upon illusion, and the very conceptions we use in describing it to others, or in thinking of it ourselves, are abstracted from anthropomorphic fancies, which science forbids us to believe and Nature compels us to employ.

The development of the powers of sense-perception and of calculation ages before they were effectively employed in searching out the secrets of physical reality were next considered, this leading up to the keynote of the address—that as natural science grows it leans more, not less, upon an idealistic perception of the universe.

## Government Analytical Work.

THE Report of Dr. T. E. Thorpe, the Principal Chemist of the Government Laboratory, which has just been issued, is a record of the work done during 1903 in protecting the interests of the Revenue and other Government Departments. The number of samples examined has been nearly sixty thousand, by far the greater number being tests made to ascertain the liability to spirit-duty. A note is given that among the imports were many instances of goods described as "extract of malt." This liquid, in these cases, having the density, alcoholic strength, and general character of ordinary beer, was charged the usual beer-duty. Most of the coffee sampled by the Laboratory was for export or use as ships' stores. Some was tested to determine the nature of artificial colouring-matter supposed to have been used for the purpose of giving the berries a fictitious appearance of value. Nothing was found of a nature likely to be deleterious to health. One sample of coffee extract examined proved to be simply burnt sugar. Offal tobacco, which is used for the manufacture of nicotine and for sheep-dips and insecticides, has to be tested for drawback, and the nicotine is also assayed to insure that 90 per cent. is present, as required by the Treasury. In regard to the sampling of saccharin-containing articles, Dr. Thorpe called the attention of the Board of Customs to the importation of chemicals related to saccharin and requiring only very simple treatment for conversion into this compound, and it was decided that such substances are liable to saccharin-duty. Goods suspected to be of this nature, as o-toluene-sulphonamide, are now sampled and sent for test to decide this point. Arsenic was found in thirty-four out of 1,218 samples of beer in a sufficient quantity to render it necessary to notify the brewers that their materials were contaminated. Herb-beers were examined for alcohol in excess of 2 per cent. Of 852 samples, 269 contained excess of spirit, the amount ranging up to 9.1 per cent. The exportation of medicinal tinctures, flavouring-essences, and perfumes on drawback shows an increase from 118,557 proof gals. in 1902 to 121,157 in 1903. Samples of 5,707 gals. of mineral naphtha for use in making methylated spirit were examined, and all were approved. A large number of applications for permission to use pure duty-free spirit, or spirit specially denatured, have been referred to the Laboratory for report. The total quantity of spirit issued under the Finance Act, 1902, has been 208,724 proof gals., 2,272 being for use in universities and the balance for manufacturers' requirements. Flavouring-matter of any kind is illegal for use in manufacturing cigars, and two of the illegal fluids examined were antiseptics supplied to manufacturers. It may be noted here that any person supplying such a preparation to a tobacco-manufacturer is liable to a penalty of 200l. Among the miscellaneous samples examined for the Excise were eighty-six patent medicines, to ascertain liability to stamp-duties. There is an interesting

note about rosin size used at a paper-mill, which, being discharged into a trout-stream, killed a number of fish by blocking up the gills. Weak solution of copper sulphate, used at Kew as a parasiticide for cucumbers and tomatoes, was found to answer well and not to affect the fruit injuriously. No trace of copper could be detected in either the cucumbers or tomatoes. The drugs taken from the medical stores of passenger-ships were found satisfactorily to conform with the requirements of the British Pharmacopœia. A veterinary preparation sent through the post in a tin exploded, and was examined by the Laboratory chemists. The sender refused to give any information of its composition, but it was found to contain potassium permanganate and sulphur. Samples of cod-liver oil (1), compound liquorice powder (1), iron pills (2), and blue pills (1) were referred to the Laboratory by magistrates in accordance with the Sale of Food and Drugs Acts, and in all cases the analysts' reports were confirmed.

### "Violent Deaths."

It is within the province of the lay Press to make more or less flippant comments on the increase in "Marriages" or the decrease in "Births," when the annual report (two years behind) of the Registrar-General is issued. Much sport is obtained by contrasting the forwardness of the widow with the backwardness of the widower, when the comparative statistics of re-marriages are dealt with, and "Births" are likewise the play of "smart" journalism; but the semi-tragic character of the pharmacist's calling makes "Deaths" and especially "Violent Deaths" the most enthralling section of the sixty-fifth report (just issued) of "Births, Deaths, and Marriages in England and Wales (1902)." Estimating the rate of increase at the same as that which had prevailed in the last completed intercensal period, the population of England and Wales in the middle of the year 1902 was 32,997,626 persons, of whom 15,952,154 were males and 17,045,472 were females. The marriage-rate was 15.9 per 1,000 of the estimated population of all ages—the same as in 1901. From a strictly utilitarian point of view "Births" and their results are, of course, endowed with potential commercial possibilities to the pharmacist. It is interesting therefore to note that the birth-rate in 1902 was identical with that of 1901 (28.5 per 1,000), but was 1.1 per 1,000 below the average in the ten years 1892-1901. The death-rate was the lowest on record—16.2 per 1,000. During the year under notice 627 males and 372 females died from "poisons or poisonous vapours" either by accident or by suicide; the suicide figures being—males, 293; females, 211. Two females were murdered—one by antimony, the other by carbolic acid. The table opposite gives the details, and the comparative ease with which carbolic acid is still obtained is demonstrated by the fact that 162 deaths were caused by that substance. This is considerably lower than the number for 1901, and a more strict enforcement of the Pharmacy Act, as suggested by coroners throughout the country, will still further lessen the mortality with this popular poison. The fatalities caused by the mineral acids are on the increase, and oxalic acid is still a favourite suicide-medium. Like carbolic acid these are obtainable without restriction in many oil-shops and from unqualified vendors, and the need for scheduling the mineral acids is becoming annually more apparent. As in previous tables, it will be observed that the great bulk of the deaths was due to poisons employed for industrial purposes or for the sale of which the chemist is not responsible. It will be noted that these statistics are for the year 1902. It is almost a pity that such particulars cannot be more

promptly issued, but judging from the mass of statistics we are probably not justified in being too critical on this point.

	Negligence and Accidents		Suicides	
	Males	Females	Males	Females
Acetic acid ... ..	1	1	—	1
Acornite ... ..	1	—	—	—
"Alcoholic spirits" ... ..	7	2	—	—
Ammonia... ..	6	6	3	7
Ammonium bichromate ... ..	1	—	—	—
Anæsthetics—				
A.C.E. mixture ... ..	3	3	—	—
Atropine ... ..	1	—	—	—
Chloroform ... ..	17	31	—	—
Chloroform and ether ... ..	2	3	—	—
Ether ... ..	6	3	—	—
Nitrous oxide... ..	—	1	—	—
Nitrous oxide and ether ... ..	2	1	—	—
Kind not stated ... ..	16	6	—	—
Arsenic ... ..	4	4	—	—
Atropine and cocaine ... ..	1	—	—	—
Belladonna ... ..	1	—	—	1
Belladonna and aconite ... ..	—	1	1	2
Belladonna liniment ... ..	—	—	2	—
Bichromate of potash ... ..	—	1	2	—
Calomel ... ..	—	—	2	1
Carbolic acid ... ..	14	8	63	77
Carbon dioxide ... ..	9	1	1	—
Carbon monoxide ... ..	9	2	—	—
Caustic soda ... ..	2	—	—	—
Chloral ... ..	6	—	—	—
Chlorodyne ... ..	7	6	6	—
Chloroform (not for operation) ... ..	4	6	—	1
Coal-gas ... ..	13	16	6	1
Coal-tar gas ... ..	1	1	—	—
Cocaine ... ..	2	1	1	—
Corrosive sublimate ... ..	—	—	2	1
Cream of tartar ... ..	1	—	—	—
Creosote ... ..	2	—	1	—
Cyanide of potassium ... ..	1	—	18	1
Digitalis ... ..	1	—	—	—
Disinfectant ... ..	—	—	1	3
Fumes, blast-furnace ... ..	3	—	—	—
Fumes, charcoal ... ..	5	—	—	—
Fumes, gas (kind not stated) ... ..	3	—	—	—
Fumes, kiln ... ..	7	—	—	—
Fumes, naphtha ... ..	1	—	—	—
Fumes, nitric acid ... ..	1	—	—	—
Fusel oil ... ..	—	—	—	1
Hydrochloric acid ... ..	10	4	29	14
Iodine ... ..	—	—	1	—
Lead ... ..	2	8	—	1
Liniment ... ..	5	2	2	3
Mercuric oxide ... ..	—	1	—	—
Mercury ... ..	—	—	1	—
Narcotic (kind not stated) ... ..	—	1	—	—
Nicotine ... ..	—	—	1	—
Nitric acid ... ..	—	1	5	3
Opium, laudanum, morphia ... ..	51	19	38	18
Oil-gas ... ..	1	—	—	—
"Overdose of medicine" ... ..	2	—	—	—
Oxalic acid ... ..	5	4	37	27
Paraffin ... ..	1	3	—	—
Phosphorus ... ..	2	—	3	5
Poisonous berries ... ..	3	1	—	—
Prussic acid, oil of almonds ... ..	3	1	29	2
Sewer-gas ... ..	1	—	—	—
Sheep-dip ... ..	1	1	1	1
Smoke ... ..	1	1	—	—
Soothing syrup ... ..	1	—	—	—
Strychnine, nux vomica ... ..	6	2	4	7
Sulphate of mercury ... ..	—	—	1	—
Sulphocyanide of ammonia ... ..	—	—	1	—
Sulphonol ... ..	1	2	—	—
Sulphuretted hydrogen ... ..	6	—	—	—
Sulphuric acid ... ..	2	—	3	3
Turpentine ... ..	1	—	—	—
Vapo-eresolene ... ..	—	—	—	1
Verdigris... ..	—	—	1	—
Vermi-killer ... ..	—	—	—	3
Zinc chloride ... ..	3	—	—	—
Kind not stated... ..	12	6	23	25



### Parliament Adjourns.

A few hours before Parliament adjourned last Monday the final stages of the Shop-hours Bill were rushed through. At about the same time that Lord Avebury was telling the Lords that "it was impossible to propose amendments at that stage," and that "he had confidence that his Majesty's Government would introduce an amending Bill in another Session," the Federation of Local Associations at the annual meeting held in Sheffield resolved to bring the claims of chemists for inclusion in the Bill before the Government. Nothing could of course be done; chemists are excluded from the Bill, and now the only hope is an amending Bill. The Lords object to the prevailing practice of clearing the Order-book of the House of Commons so late in the Session, and the rushing of the final stages of any Bill must be detrimental to efficiency. In this case Lord Avebury found it useless to bring forward several amendments which will eventually have to be considered in detail before the smooth working of the Bill is assured. The Weights and Measures Bill has also become an Act, but shorn of the metric-system clauses, which are of too much importance to be slipped into an Act dealing with administrative amendments of previous Acts. The chief point in the Act is that it enables the Board of Trade to make the charge for verification of weights and measures uniform throughout the country and reduce the charges in those cases where they are too high.

### A Poison Incidence.

Mr. T. H. W. Idris has been interviewed by the "Daily Express" in regard to the sale of "XL-All" Insecticide by a City firm of ironmongers. Mr. Idris is spoken of as the President of the Pharmaceutical Society, but that does not detract from the romantic story he is said to have told to his interviewer.

When I was a chemist in Seven Sisters Road, some thirty years ago, there was living in a villa opposite Finsbury Park a retired detective-inspector of police. He had a wife, who was said to be dying of internal cancer. He was fond of coming to me and discussing detective matters—poisoning cases, murders, and the like. One day he said he wanted some strychnine to kill rats in his house. The rats, he said, made so much noise gnawing the woodwork at night that his invalid wife was kept awake. Although I did not feel easy in my mind, I eventually, as I was bound, sold him, with the prescribed formalities, a bottle of vermin-killer. This contained strychnine. Some weeks later I was surprised to hear that the inspector's wife had died suddenly. A few days subsequently the inspector came to see me, bringing with him a young, well-dressed woman, whom he introduced as his housekeeper. The doctor who attended the dead woman happened to call on me, and I ventured to ask him whether Mrs. B. died of cancer. He said, "Most certainly." I told him my suspicions. He was thunder-struck, but after reflecting said he did not see what could be done then. My suspicions were some months later confirmed, when a woman came to my shop who was nursing the detective-inspector, and who had also nursed his wife. I asked her how Mrs. B. died. She told me, "In great agony," and that her body was bent up in convulsions. Curvature of the spine and convulsions are some indications of poisoning by strychnine, Mr. Idris explained. The inspector himself was lying dangerously ill—he died soon afterwards of pneumonia, and there the matter ended.

Are there any of our readers who can beat this story of a chemist's shop?

### B.P.C. Attendances.

In the *C. & D.*, September 14, 1878, was published a table showing the attendances at the meetings of the British Pharmaceutical Conference since its foundation. We were last week reminded of this by the sight of the reprint of the data we then published, which is pasted inside the cover of the Conference attendance-book. This list, with the help of the Assistant-Secretary, we have brought up to date. We have not, however, carried our analysis to such a fine point as was done twenty-five years

ago, when the names of local members and visitors were differentiated and a third column of "doubtful" names included. At the inaugural meeting at Newcastle-on-Tyne in 1863 there were twenty-four persons present.

1864 Bath ... .. 60	1885 Aberdeen ... .. 150
1865 Birmingham ... .. 73	1886 Birmingham ... .. 190
1866 Nottingham ... .. 84	1887 Manchester ... .. 249
1867 Dundee ... .. 67	1888 Bath ... .. 146
1868 Norwich ... .. 74	1889 Newcastle-on-Tyne 182
1869 Exeter ... .. 69	1890 Leeds ... .. 154
1870 Liverpool ... .. 170	1891 Cardiff ... .. 115
1871 Edinburgh... .. 116	1892 Edinburgh... .. 218
1872 Brighton... .. 137	1893 Nottingham ... .. 171
1873 Bradford ... .. 104	1894 Oxford ... .. 156
1874 London ... .. 175	1895 Bournemouth ... .. 138
1875 Bristol ... .. 118	1896 Liverpool ... .. 188
1876 Glasgow ... .. 176	1897 Glasgow ... .. 291
1877 Plymouth ... .. 137	1898 Belfast ... .. 213
1878 Dublin ... .. 147	1899 Plymouth ... .. 148
1879 Sheffield ... .. 148	1900 London ... .. 237
1880 Swansea ... .. 79	1901 Dublin ... .. 235
1881 York ... .. 168	1902 Dundee ... .. 190
1882 Southampton ... .. 119	1903 Bristol ... .. 185
1883 Southport ... .. 186	1904 Sheffield ... .. 191
1884 Hastings ... .. 80	

There are several points that might be dilated upon in connection with these figures, but the most interesting point is that the attendance at the Conference is not declining, and that the larger the town the larger the attendance. The number of members who attend the Conference is not the only consideration that makes for a successful meeting, and Sheffield may congratulate itself in having brought one of the most enjoyable programmes ever produced to a successful conclusion even if the attendance did not reach the high-water mark.

## Legal Reports.

### High Court Cases.

#### "VINOLIA" FOR "SUNLIGHT."

MR. JUSTICE BIGHAM, sitting as Vacation Judge, on Wednesday had before him a motion for injunction by Messrs. Lever Brothers, proprietors of "Sunlight" soap, to restrain W. H. Oliver, an oil and colour man, of 252 St. Anne's Road, Tottenham, for passing off soap as "Sunlight" soap which was not of the plaintiffs' manufacture. The defendant, who appeared in person, said he was a licensed hawk, and went round with a van. He could only conjecture that soap which came out of its packages, owing to the jolting of the van, had been by mistake put into the wrong wrappers. It was said that "Vinolia" soap had frequently been sold to a customer in "Sunlight" wrappers, but he had no interest in pushing one more than another.

His Lordship granted an injunction, but the plaintiffs did not press for costs.

#### "Absorbine" Appeal.

MESSRS. B. C. TIPPER & SON, Veterinary Chemical works, Birmingham, remind us that "Absorbine" is an ointment sold in pots, and not an embrocation as stated last week (page 266).

### Sale of Food and Drugs Acts.

#### COCA-WINE.

At Leyland (Lancashire) on August 8, Ralph Seed, grocer, Farington, was summoned for selling adulterated non-alcoholic coca-wine. Evidence was given that an officer called at the defendant's shop on June 8 and saw exposed for sale in the window several bottles of "non-alcoholic coca-wine." He purchased a bottle for 1s. 6d. The label on the bottle said it was "non-alcoholic coca-wine, prepared from the finest leaves of *Erythroxylon Coca*. Dose: A wineglassful two or three times a day before meals; children half the quantity." The county analyst stated that it was a flavoured syrup practically devoid of coca, containing 3.9 grains of salicylic acid per pint. The case was adjourned.

## Federation of Local Pharmaceutical Associations.

THE tenth annual meeting of the Federation was held at the Royal Victoria Hotel, Sheffield, on August 12. Mr. W. L. Currie, the Chairman of the Federation, presided, and he was supported by Mr. R. Feaver Clarke, Mr. H. Antcliffe, and Mr. W. Watson-Will (Secretary). The following is a list of the delegates who were present :

*Aberdeen*.—W. Giles, J. Paterson.  
*Bradford*.—A. Hanson, H. Dunn.  
*Bristol*.—H. E. Boorne.  
*Cambridge*.—E. Saville Peck.  
*East Aberdeenshire*.—J. F. Tocher.  
*Edinburgh*.—W. Duncan, J. Rutherford Hill, W. P. Wilson, G. H. C. Rowland.  
*Ecceter*.—H. Wippell Gadd.  
*Grimsby*.—H. W. Colley.  
*Glasgow*.—W. L. Currie, G. Robertson, R. Brodie.  
*Leeds*.—G. W. Worfolk, J. H. Beacock, F. Pilkington Sargeant.  
*Leicester*.—F. W. Goodess.  
*London*.—T. H. W. Idris, W. S. Glyn-Jones, W. Watson-Will.  
*Manchester*.—H. Kemp, A. J. Pidd, W. Kirkby, J. Wild, J. Grier.  
*Midland*.—F. H. Alcock.  
*Newcastle-on-Tyne*.—G. Foggan.  
*North Kent*.—R. Feaver Clarke.  
*North Staffordshire*.—E. Jones.  
*Nottingham*.—A. Eberlin.  
*Sheffield*.—G. T. W. Newsholme, A. R. Fox, G. Squire, H. Antcliffe, J. G. Jackson.  
*Tunbridge Wells*.—A. E. Hobbs.

In addition to the delegates there were several other pharmacists present, including Mr. R. A. Robinson (President of the Pharmaceutical Society of Great Britain) and Mr. W. F. Wells (Vice-President of the Pharmaceutical Society of Ireland).

Mr. W. L. Currie opened the proceedings by calling on the Secretary to read the circular convening the meeting; and, on the motion of Mr. Tocher, it was agreed to take the minutes of the last annual meeting as read. The report of the Executive Committee (to which reference was made in a recent issue of *THE CHEMIST AND DRUGGIST*) was also taken as read, on the motion of Mr. Glyn-Jones.

### THE YEAR'S WORK.

The Chairman then gave a running comment on the report of the Executive Committee referring to the steps taken to draft a circular regarding misleading statements on the Pharmacy Bill. He referred to the promises received from members of Parliament to support the Bill, and answered those critics who said the Federation should have left that part of the work to be done by the Council of the Pharmaceutical Society. The discussion on territorial representation had resulted in a batch of resolutions which the meeting would vote on that day. Mr. Currie also spoke of the enormous amount of work that the new Secretary—Mr. W. Watson-Will—had got through during the year, and of the serious illness of Mr. G. T. Turner, of Bristol, which has led to his resigning his position on the Executive Committee. The object of the Federation is to strengthen the hands of the Pharmaceutical Society in every possible way, and he hoped the bonds between the two would be strengthened in years to come.

### THE FINANCIAL REPORT.

Mr. Watson-Will, in commenting on the financial report, noted that the Leamington Association was defunct, but that two more associations had joined during the year—Thames Valley and Blackpool. The Southport Association also appears to be dead, as repeated letters had failed to produce any reply. Mr. Johnstone had kindly taken the place of Mr. Hazelwood Jones in auditing the accounts. The balance due to the Treasurer at the end of the previous year (4*l.* 3*s.* 10*d.*) had been cleared off and a balance of 10*d.* remained. Since the accounts had been made up a cheque for 1*l.* 11*s.* 6*d.* had been received from

the Halifax Association, thus further increasing the balance.

Mr. Wippell Gadd moved, and Mr. Hanson seconded, the adoption of the report, the motion being carried unanimously.

### TERRITORIAL REPRESENTATION.

Mr. Tocher then submitted the following resolution from the East Aberdeenshire Chemists' Association :

The delegates representing the local Associations at this meeting of the Federation of Pharmaceutical Associations approve generally of the proposal to elect members of Council on the territorial system, and are of opinion that the scheme submitted at the Bristol meeting of the Federation last year provides a suitable basis for discussion as to the best means of effecting the change.

Mr. Tocher said the scheme of territorial representation had not met with much opposition, but had been viewed with favour by most of the Associations discussing it, and in no single instance had a resolution been passed against it. In cases where the resolution had not been discussed or no resolution passed he had been favoured with letters from prominent pharmacists in favour of it. The chief points in favour of the idea were these : It was a proposal to abolish the present system of voting, whereby a selection of seven, or less, had to be made from a group of candidates about whom the average chemist knew little and cared less. It was a proposal to institute a system whereby each pharmacist in the country would have a representative upon the Council representing him or representing a local group of pharmacists. He thought he had seen it stated somewhere that pharmacy was the same everywhere. From that doctrine he emphatically dissented—that pharmacy in the East-end was the same as pharmacy in the West-end, in the towns as in rural districts, and that the methods of medical practitioners were the same everywhere in England. Apart from this, it was a question whether the mind of the electorate was properly expressed by a system which placed the mind of the pharmacist in a state of confusion at the moment of voting. To be a conscientious voter one would be put to a considerable amount of research in getting up a small "Who's Who," and the effect was a *minus* quantity for someone. It was a fact that a great many pharmacists disenfranchised themselves by not only refraining from voting but by voting for a less number of candidates than they might, to enlarge the chances of a particular candidate. They wanted a system by which the Council could keep itself in touch with opinion throughout the country; a system by which the Council, before coming to a conclusion upon any important point, must listen to the views of men on the spot throughout the country—in touch with their constituents. In no other way would business-men be satisfied that they had a voice in affairs when necessary. He looked forward with confidence to definite district representation and to its being a means of stimulating interest in pharmaceutical affairs generally and in every direction—so that when the craft speaks the Society speaks, and when the Society decides, it is the opinion of the entire pharmaceutical body. (Applause.)

Mr. Pilkington Sargeant, in seconding the resolution, said he believed the vast majority of the electorate of the Society desired some change in the system of election of councillors. In the past anyone who had had the temerity to criticise the administrative methods of the Society had generally been accused of formulating some destructive policy without giving any indication of how a corresponding constructive policy could be brought about. In this case they asked for leave towards sanctioning work in the direction of not only breaking down a system, but of building up another one. The present system was not one which could be considered satisfactory, because, in the first place, adequate representation of all interests was not assured; it lacked the stimulating interest which a healthy system of competitive election should infuse among the electorate. The fact that the Council as at present constituted was fairly representative, as had been stated, did not in his opinion affect the case at all, and if they had an election of councillors by districts he thought it could not but be admitted that they would have all interests assuredly represented. Under this scheme he understood that there would be two representatives for Yorkshire, and that these two



representatives would have to place their views before the electorate, otherwise they would certainly not be elected—they would not have the slightest chance of election unless they nursed their constituents. He referred to the fact that the county town of Yorkshire was at the present time without a local association, and said he thought that if they had this system of territorial representation there was not the remotest doubt that sufficient interest would be infused into the chemists of York and district to bring about the formation of an association, and he thought they would agree that the measure of activity by local associations was an indication of the interest taken by local pharmacists.

The meeting then proceeded to discuss the following resolution sent up by the Manchester Pharmaceutical Association—

That this meeting approves of the principle of territorial representation upon the Council of the Pharmaceutical Society, without committing itself to Mr. Tocher's scheme formulated at the last meeting of the Federation of Local Pharmaceutical Associations

—which was moved by Mr. Kirkby as an amendment to Mr. Tocher's motion. Mr. Kirkby said that he was not prepared to make a speech as to the merits or demerits of Mr. Tocher's scheme. He could tell them in a few brief words the feeling in Manchester—that while acknowledging the desirability of some kind of territorial representation whereby interest would be stimulated and in some cases generated in parts of the country which were at the present time lifeless as far as pharmaceutical matters were concerned, the members of the Pharmaceutical Association of Manchester did not feel that the time was ripe for going so far into the details as did Mr. Tocher's scheme; and one reason for this was that at the present time, and for some time past, in pharmaceutical politics they were dependent upon gentlemen in various parts of the country whose services they would be in some danger of losing if they confined the representation within certain prescribed areas, and that was too great a danger to risk. Until opinion was more largely developed it was better to make advance slowly, and it therefore seemed desirable that some such amendment might be moved in order that they might have longer time to consider and weigh the *pros* and *cons* of Mr. Tocher's scheme than some of them had had during the past winter.

The amendment was seconded by Mr. Pidd.

Mr. Glyn-Jones said he was not sure that anyone had made out any really serious case against the present system of election—(hear, hear)—and that was the first thing they ought to be satisfied about. It was true that the present system is not perfect: no system could be perfect, and certainly no system of election would ever satisfy the requirements of a mathematician like Mr. Tocher. (Laughter.) The main thing advanced in favour of the scheme was that the voters at present were not in a position to exercise their judgment so as to vote satisfactorily, and Mr. Tocher told them that a large number (he believed he said a majority) of the electors under the present system knew little about the candidates and cared less. If that were the case, something other than territorial representation was necessary. If members of the Society throughout the country with all the facilities they had for following the duties of their representatives upon the Council—if someone could come there and say, "We want you to help us to vote because we know little and care less about the candidates," he said that no system of territorial representation would make them workers. There were serious objections to such a system. While the speakers had been talking he had been thinking what might happen if this district of Yorkshire had to return one candidate. He would suppose that Mr. Newsholme was a candidate and the sitting member and Mr. Sargeant his opponent. They could imagine them nursing the constituency and going round to stimulate the interest of the local Associations! (Laughter, and Mr. Tocher: "Hear, hear.") They would have their local Associations turned into electoral caucuses for the Pharmaceutical Society. If the activity of the local Association depended upon the interest it took in general pharmaceutical politics, what they ought to do was to educate this Association in pharmaceutical politics. What they wanted on the Council was not a representative from Cardiff, Newcastle, or elsewhere—they wanted the various

types of businesses to be represented. Mr. Harrison, of Newcastle, represented the chemists of Cardiff as well as Mr. Hagon, and the latter represented a type of chemist not only in Cardiff but throughout the country. The last election proved that this representation could be obtained. (Hear, hear.) Mr. Gibson and Mr. Hagon were elected on those lines, and he was certain there was little at fault in the present system seeing that it was a system intended for intelligent electors. (Applause.)

Mr. Newsholme said he agreed with everything Mr. Glyn-Jones had said on this subject. He had heard it stated that the result of the last election showed that the country wanted territorial representation, because Mr. Hagon and Mr. Gibson were in favour of it and they had been returned. He himself was returned to the Council—(Mr. Tocher: "Hear, hear")—when everyone knew his views and that he was opposed to it, and yet he received a large number of votes; that proved that there was nothing in the idea that territorial representation had decided the election. The Council was more representative at the present time than it had ever been before, and contained men representing every type of business. The Pharmacy Act had not been properly worked for all it was worth, and he did not think it at all advisable for schemes such as this to occupy the attention of the pharmacists of the country in the way they were doing, because constantly wanting changes in Acts of Parliament (for that was what it would need) and the discussion of schemes of this kind were a waste of their time and energy. What they should do was to devote their energies to the perfection of the present system.

Mr. Jones (Hanley) said that if a list of associations were set out who had supported Mr. Tocher's scheme the name of his Association would not be included. They had had a strong and animated discussion upon the subject last winter, when a resolution was passed in favour of considering the scheme, and that then something might be done to improve the present system. Mr. Glyn-Jones had practically said that pharmacy was the same everywhere—(no, no)—well, that they could get representatives to represent pharmacy on the Council without territorial representation. But in the past provincial pharmacists had not been so represented on the Council, though he agreed with Mr. Newsholme that the present Council did represent provincial pharmacy better than it had ever done before. At the last election Mr. Gibson and Mr. Hagon were returned; the subject of territorial representation had been the means of creating great interest, and resulted in the return of two men in favour of the system. His greatest argument in favour of the change was that apathy was too strongly prevalent among the chemists of the country towards the Pharmaceutical Society. Mr. Newsholme suggested that they should take warning and leave things as they were, and try to work out some more satisfactory working of the Pharmacy Act; but the apathy of the chemists in the country to-day showed there was something wrong somewhere, and it might be in the system of election of representatives. He contended that if they adopted some such scheme as territorial representation, and if they brought men into the districts who were known, those who had a vote would use it, and those who had not would desire to have one.

Mr. F. Goodess (Leicester) said the Leicester Association had come to no decision in the matter. They foresaw a difficulty in finding candidates, as these must be men of means with plenty of time, and the difficulty of getting up to town and back would be against the scheme.

Mr. Foggan (Newcastle) said the resolution moved by the Newcastle-upon-Tyne Association was an almost unanimous expression of opinion in favour of Mr. Tocher's scheme. The only little disagreement to the scheme at the end of the resolution was that they did not think the present an opportune time to push the matter forward. He understood that the arguments in favour of the latter clause were that it was undesirable to approach the Pharmaceutical Council at present as having so many important matters on hand.

Mr. Rowland (Edinburgh) said Mr. Newsholme practically admitted that the Pharmacy Acts had not been properly carried out so far, and that it was a waste of time discussing such schemes as territorial representation.

If the Pharmaceutical Society had so far failed to carry out the Acts, she had proved unseaworthy—(laughter)—and so they could not be better employed than in building a new craft. (Renewed laughter.)

Alderman Dunn (Bradford) at this point raised the question whether the amendment was really an amendment to the resolution.

The Chairman, however, promptly ruled that it was a proper amendment.

Alderman Dunn continuing said that what struck him as the strongest point was that no system of election could be perfect, and that it was no use their attempting anything in the way of perfection. If it was no use trying to improve on the present system it was no use their holding meetings. Mr. Glyn-Jones had said that local associations would be formed into local caucuses; to that he said, "hear, hear"; it would be an excellent thing for them. It would bring about a considerable interest in the Association and the Society. Mr. Newsholme had said that all kinds of businesses were represented upon the Council of the Society, but the speaker was very much in doubt as to whether the purely rural business was represented in any way, and they must recognise that the purely rural chemist was, if they excluded a few large towns, in a large majority in the country, and these were unrepresented.

The Manchester amendment was then put to the vote and lost, nine voting for and twenty against. Then ensued a beautiful tangle. The Chairman put the original motion, and after it had been declared lost by fourteen to fifteen it was discovered that this blocked further discussion. The Chairman had no lack of advisers, and it was finally decided to allow the last vote to be cancelled and to begin *de novo*.

By the permission of the meeting, in order to put a clear issue before them, it was moved by Mr. Tocher:

That this meeting approve generally of the principle of territorial representation.

This was seconded by Mr. Alcock (Birmingham), and after some further remarks the resolution was put and carried—twenty-one voting for and seven against.

Mr. Tocher then withdrew the second resolution of the East Aberdeenshire Association in favour of petitioning the Pharmaceutical Council to consider the desirability of effecting a change in the method of election on the lines of the resolution now carried, and he moved to pass to the next business, which was agreed to.

The following resolution from the Cardiff and District Pharmaceutical Association was then brought forward—

That this meeting of the Federation of Local Pharmaceutical Associations is in favour of territorial representation, and is of opinion that such a measure would very materially increase the interests of the trade in the working of the Society; further, that this meeting respectfully urges the Council of the Pharmaceutical Society to formulate a scheme for such representation, and to include in such a scheme a provision for the compulsory yearly registration of all qualified chemists, and a payment of a small annual registration-fee, such a payment to carry with it a vote in the election of a representative for the district in which the member resides

—but it was lost on being put to the vote.

#### MEETINGS OF THE FEDERATION.

A resolution from the Great Yarmouth Association in favour of two general meetings of the Federation per annum, and suggesting the early part of the year for the second meeting, fell through, owing to the absence of delegates from that Association, and

Mr. Watson-Will then brought forward a resolution from the London Chemists' Association—

That the Federation of Local Pharmaceutical Associations hold two meetings yearly—one to take place after the Conference, and the other in London after the annual Pharmaceutical meeting in May.

He pointed out, however, that it was impossible to hold two meetings, one in May and the other in August, and said that he did not much favour the resolution. Mr. Glyn-Jones accordingly moved the resolution as follows:

That the Federation of Local Pharmaceutical Associations hold two meetings yearly.

Mr. Watson-Will, however, declined to second the resolu-

tion even in this guise, and Mr. Idris having also expressed his inability to second it, Mr. Glyn-Jones withdrew the motion.

The following resolution from the Sheffield Association was then submitted:

That this Society feels the need for more ample opportunity being given for general discussion of business.

Mr. Newsholme, in moving this resolution, suggested that the members of the Executive of the Federation might confer with the Executive of the Conference to see if some better arrangement could be made for the meetings of the Federation.

Mr. Antcliffe seconded the motion, and Mr. Glyn-Jones, in strongly supporting it, suggested that the Federation meeting might be held at the same time as the sessions of the Conference.

Mr. Tocher supported, and said it was time arrangements were made so that they should not wish to run away to catch a train while the business was being transacted. He thought if the meeting could be held on Tuesday afternoon, or Wednesday morning, it would be a good thing.

Mr. Foggan thought this would detract from the attendance at the meetings of the British Pharmaceutical Conference, the attendance at which was quite small enough as it was. He suggested that the whole of the Friday following the Conference should be devoted to the meeting of the Federation.

Mr. Hill agreed with Mr. Glyn-Jones's suggestion about sectional meetings, but thought they should not be held at the same hour. In the American Association the Trade Interests Section of the Association met at three o'clock on Tuesday afternoon, which was the first business day of their session, and at one sitting they were able to get through the whole of the business—and they got through a large amount of business which was amply discussed. He suggested that the excursion might be arranged for the Friday, and that the Conference should be so adjusted as to allow them to give up the afternoon of the Tuesday to the Federation business.

Mr. Idris earnestly asked the members not to arrange meetings so as to conflict with the meetings of the Conference. If they wished to injure the Conference (which he knew they did not wish to do), they could not do it more effectually.

Mr. Kemp said there was ample time before the next meeting for the Executive to confer with the men in all districts and elicit opinions as to the most suitable time for the meeting, and to confer with the Conference authorities.

The Hon. Secretary explained that a mandate had practically been given to the Executive last year to confer with the Conference authorities, but one of the first things he had received on taking over his duties had been the London resolution; in these circumstances he had let the matter drop, for which he was perhaps more to blame than anyone; if the resolution of the London Association had been carried any arrangements made with the Conference authorities would have fallen through.

The Chairman suggested that the matter should now be left with the Executive. It was therefore agreed to add to the Sheffield resolution the words "and that the Executive be empowered to make some definite arrangement with the Conference in the future." With this addition the resolution was then adopted.

#### AMENDMENT OF RULES.

The London Chemists' Association had forwarded a resolution to the effect—

That should it be the finding of the meeting that the Federation hold two meetings annually, Rule 6 read as follows: "That a general meeting be held in London, and the annual meeting subject to the approval of the Executive Committee, be held in the same town and same week as the annual meetings of the British Pharmaceutical Conference; representatives of five Associations to form a quorum."

—and Mr. Watson-Will, having mildly suggested the desirability of associations making themselves acquainted with the rules of the Federation before suggesting alterations, pointed out the impracticability of this resolution, which was allowed to fall to the ground.



## PHARMACEUTICAL COUNCIL ELECTION.

The resolution from the Edinburgh District Chemists' Trade Association in regard to framing a set of questions to candidates for election on the Council of the Pharmaceutical Society was brought forward, and Mr. Rowland, on behalf of the Association, stated that it was not intended that this should be brought forward as a resolution at this meeting, but merely as a suggestion to the Executive, and that object had now been served. The matter therefore was allowed to drop.

## SHOP-HOURS BILL.

The same Association submitted a resolution to the effect—

That the Government Shop Hours Bill be amended by the adoption of the clause in Lord Avebury's Bill applying to chemists' shops.

The Hon. Secretary said that there was no mention of chemists in the Government Bill, but no General Order could affect businesses where the sale of medicines was carried on, and this practically excluded chemists from the Bill. He was under the impression that some statement had been made by those dealing with the Bill that the Government would consider the question of chemists' shops.

Mr. Rowland was afraid that it was too late, and said there should be some machinery in the Executive to deal with urgent matters of this kind.

Alderman Dunn asked if this were not a case in which application should have been made to the Pharmaceutical Society.

Mr. Idris thought the business of the Pharmaceutical Society was already too much taken up with trade matters, and this matter was one which could be more properly dealt with by the Federation.

The resolution was put and carried as amended.

Mr. James Paterson then read his paper on

## PROVINCIAL SCHOOLS OF PHARMACY.

The object of this paper, a continuation of the one read at the Dublin meeting of the Federation (*C. & D.*, August 10, 1901) was to emphasise the change that has taken place in the attitude of the Scotch Education Department towards technical education and the methods of fostering and encouraging it. The following is a synopsis of the "Scotch Code of Regulations for Continuation Classes" in so far as they bear on technical and scientific education. The "Note" which prefaces it gives the following general description of its purpose:

It is applicable to all classes for the further instruction of pupils who have left school (elementary or secondary) whether in general knowledge, in subjects of Science and Art, in commercial subjects, or in any special subject which can be shown to the satisfaction of the Department to be useful to persons following a particular business or occupation.

The classes may be held at any time of the day, morning or evening, and instruction may be given either in single subjects or in groups of subjects.

The grants to certain technical colleges and special institutions of various kinds will be made on the basis of special minutes applicable to each case.

This description, it is at once felt, marks a great advance on the old scheme of Science and Art education, and this will be further made plain when the matter is considered more in detail.

The Code has four divisions:

**DIVISION I.** is concerned with classes forming a continuation of the general education received while at school.

**DIVISION II.** is described as "Specialised Instruction Elementary" and provides, under Article 14, for the following classes among others:

*Mathematics.*—Elementary Geometry, Algebra, Dynamics.

*Science.*—The elementary study, theoretical or practical of Physical or Natural Science, or any branch thereof.

The application of Mathematics or Science to particular industries.

**DIVISION III.** concerns "Specialised Instruction Advanced," and is described as follows:

This division shall comprehend organised courses of instruction in the subjects of Division II, or other subjects of a more advanced character which may be re-

garded as a development of the subjects of that division. Such courses may either provide for graduated instruction in a single subject approved by the Department as suitable for recognition under Division III., or for systematic instruction in a group of subjects, arranged with a view to fitting students for the intelligent practice of some particular industry or occupation. Courses to be recognised in this division must, as a rule, extend over at least three years.

**DIVISION IV.** takes cognisance of auxiliary classes which are related to Division I. and therefore do not concern us here.

The Department attach the greatest importance to the classes under Division III.—and they are those on which pharmacists' interest will chiefly centre—as can be seen from the following extract from their circular accompanying the Code. They say:

The realisation of the main objects of the Code may be said to rest essentially upon the success of the classes conducted under Divisions II. and III., and a word of explanation as to the scope of the classes conducted under these divisions may be useful. The subjects dealt with are those enumerated in Article 14 and such other subjects as are the natural developments of those named. Both presuppose the instruction of the pupils in the subject, or a well-defined and homogeneous group of subjects of practical value to them in view of their occupations; but whereas in certain cases local circumstances may render it possible to arrange a comprehensive and progressive course of study over several years, in others such continuity of instruction cannot be looked for, and sections or fragments only of the complete course can be dealt with. . . . The latter case is provided for by the regulations under Division II., but it is to be remembered that desultory instruction of this kind, though not without its value, is but an imperfect substitute for the systematic and prolonged study required for recognition under Division III.; and wherever possible courses should be arranged under that division—under which alone the objects of this Code can be fully carried out—in preference to Division II. The distinction between classes under Divisions II. and III. is not necessarily one of greater or less advancement, but depends rather on completeness and continuity of curriculum.

The idea in the mind of the Department seemingly is that these classes would be taken during apprenticeship, because they think a further course of study desirable, as the circular goes on to say:

Any scheme of technical education would be incomplete which did not provide instruction of the very highest kind in applied Science and Art to selected students who will devote their whole time to study. They think, therefore, that a further differentiation of institutions is necessary, and that instead of all alike being subjected to the same set of regulations, as has been done hitherto, a few which have had an outstanding record of success in the past, which are well staffed and well equipped for a considerable variety of work, and which are situated in the natural centres of population for large areas, may be allowed to proceed upon lines of their own, in the hope that they may develop into institutions worthy to rank, not in number of students, but in quality and advancement of work, with the best of their kind in any other country.

This is the class of institution mentioned in the note to the Code, which is to be dealt with by special minutes applicable to each case.

## THE MANAGEMENT

Of these specialised classes is to be delegated by the School Board or other local authority to a committee or committees, which may include persons not members of their own body, and this committee is to have the superintendence and direct management of the classes.

## THE OTHER CONDITIONS

pre-requisite to the establishment of the classes are chiefly the following, viz.:

The classes are not to be conducted for profit.

The managers (that is, the committee in charge) proposing classes may be required to state from what funds the expenses of the class will be met in the first place.

Payments to teachers must, as a rule, be a fixed stipend per session or per lesson, agreed upon beforehand, and must not be wholly or in part contingent upon the amount of grant earned.

The minimum number in the classes is fixed at twenty in theoretical subjects and ten in the practical. It is provided, however, that allowances may be granted as for these

numbers, in cases where the inspector certifies that this is required by the circumstances of the locality, that the classes are efficiently taught, and when he further certifies that a larger attendance could not reasonably be expected.

The minimum time to be devoted to the classes is twenty weeks, and they are to have at least forty hours' instruction in that time.

A time-table, and a syllabus showing the subject-matter of the course and its distribution over the various years, must be submitted for approval to the Department.

#### AS REGARDS TEACHERS

the Code says, "No general qualification to teach the subjects in this Code will be granted, but evidence will be required in all cases of knowledge of the particular subject which it is proposed to teach"; and the Department make the meaning of this clear in the circular previously referred to. They say:

In view of the special object of this Code it is evident that the prime requisite of a teacher is real knowledge of the subject taught rather than that acquaintance with educational aims and methods which forms a necessary part of the technical training of teachers of schools giving a general education. While, therefore, certificated teachers will prove the most suitable teachers for Division I., for the other divisions other and special qualifications will, as a rule, be necessary. These qualifications should, wherever possible, include a practical acquaintance with the business, occupation, or industry to which the class is relative, and, other things being equal, the instruction given will be all the better if that acquaintance is a present and living one. Experience shows that it is not impossible for teachers or other persons, who from their previous training have become, as it were, examination experts, to pass theoretical examinations in a subject of a technical character while altogether destitute of any practical acquaintance with the related industry. It is evident that instruction by such persons will fall far short in practical utility of that given by persons whose theoretical knowledge is corrected and implemented by practical experience.

#### THE FINANCIAL ARRANGEMENTS

are that the Department gives grants varying in amount per pupil per hour in the various years in the course, rising, of course, as the education progresses; the total amount, however, being regulated by conditions referred to presently.

The managers are allowed a free hand as to the fees to be charged, but in estimating the amount to be paid to the school as grant, the sum of the fees must be deducted from the expenditure. A grant may be made in aid of local scholarships given by the managers or others in circumstances and upon conditions approved of by the Department. The grant shall not exceed one-half of the total expenditure for the purpose specified. The limit of the grant (the amount of the local contribution being at least equivalent) shall be in the case of junior students 5*l.* per annum for each scholar, and in the case of senior scholarships 25*l.* per annum for each scholar—that is, the student gets 10*l.* or 50*l.*, as the case may be, or any other amount within these limits that may be agreed upon and sanctioned.

The scholarships are to be awarded by the managers on their own responsibility, but according to a scheme of examination or selection proposed by the managers and approved of by the Department. The scholarships are paid direct to the students, and must be substantial in amount.

Properly equipped laboratories for practical work must be provided to earn the higher rate of grant.

The grant as calculated in accordance with the regulations will be reduced by its excess over three-fourths of the expenditure actually incurred by managers in the maintenance of the classes. In calculating the expenditure, the salary of the teachers, and all materials used, fire, light, cleaning, etc., are included, but rent of premises where chargeable and interest on loans are not allowed as items of expenditure. From the sanctioned expenditure the amount of revenue received from fees has to be deducted, and it is on the sum as thus brought out that the grant to the school is based.

The arrangement entered into with technical colleges and special institutions is that the Department pay one-half of the expenditure as ascertained by the above method. Managers of the other schools could calculate that they would have a similar proportion to provide.

In order to meet this balance of expenditure the Department, in the circular already referred to, suggest that as

It has been usual for town and county councils to make from the Residue Grant some contribution towards the expense of classes such as those embraced in the present Code. . . . It is to be expected that such contributions will be continued, and even increased. Where such contribution is made, it is suggested that it should *not* take the form of a fixed subsidy, or of a payment upon attendances or results of examinations. It would be better that the town and county council, if satisfied that the class for which application is made is a suitable one for aid from their funds, that it has been efficiently conducted, and that the expenditure is reasonable, should recoup managers a certain proportion *er*, in extreme cases, the whole deficiency incurred by managers in maintaining the class, after deduction of the income from fees and from the grant under this Code.

In certain cases these councils might also pay the students' railway fares, and, in exceptional cases, also a small maintenance allowance where the student would have to stay away from home over-nights. The cost of equipment and the balance of expenditure should be borne by the Pharmaceutical Society—it reaps the benefit and draws the examination-fees; local associations cannot be expected to undertake it, because in establishing classes under the scheme, they would not be in a position to confine the attendance to their own apprentices or assistants—the classes would be open to all the trade, therefore this burden should fall on the Society.

#### EXAMINATIONS

and the granting of certificates are contemplated by the Department. Of the regulations concerning them, those of most interest are the following, viz.:

Where, upon examination of the syllabus of instruction and of reports of the inspector, the work of any class recognised under Division III. is held to be sufficiently important and distinctive, a special examination will be held by the Department, upon the application of managers, of such students as have completed the course (being not less than three years' duration), and certificates will be issued by the Department upon the result of such examinations. These examinations, which may be partly oral and practical as well as in writing, will be held by the officers of the Department or by specially qualified persons appointed for the purpose, and will be based upon the approved work of the class.

The certificates to be issued under this Article will be described as "Honours Certificates," and will be accepted as qualification to teach subjects included in the course.

Mr. Paterson then proceeded to state the advantages of such a scheme as here outlined. A lad at a receptive age is led on by well-defined stages to acquire the scientific and technical knowledge necessary for the performance of his work. The English Education Code, although not so elastic as the Scotch scheme, could probably be expanded on similar lines. The Scotch Code is not framed exclusively in the interests of pharmacy, but is admirably fitted to meet its requirements, and it is for the Council of the Pharmaceutical Society to set about taking advantage of the provisions laid down. The Society, having the control of pharmaceutical education, could set the standard and secure uniformity, while the Honours certificate might even be accepted as part of the qualifying examination, and thus contribute in a practical way to the division of the Minor examination. If, on the other hand, the Society decline to entertain the scheme, the question might arise in discussing the Pharmacy Bill, "Why have the promoters of this Bill declined to take advantage of the facilities for establishing a curriculum which are now and have for some time been open for their acceptance, especially as the management and control of it have been offered to them?" Something might also be said from the students' point of view, both financially and educationally, and when the necessary by-laws are put before the Privy Council to be sanctioned it might be asked what the Society does educationally for its students with the six thousand guineas it annually receives from them. The Privy Council will think, said Mr. Paterson, that "all our talk about better education is merely so much blather, has no reality in it, and that all we mean by it is somehow to gain a richer, fuller flow of guineas."



The following is the concluding part of Mr. Paterson's paper:

Phlebotomy was at one time in great vogue among medical men as a means of keeping the body in a healthy state; this notion has long ago been exploded, and now their aim in their treatment is to build up and sustain rather than deplete. Phlebotomy is the only thing we have ever tried for the cure of the educational ills which pharmacy is heir to. We raised the standard of the Preliminary examination, then ceased holding one for ourselves, leaving the applicants for admission to the business to pay the fees to the various examining bodies doing our work—taking care, however, that the old fee should still find its way to our coffers. We have been raising the standard for the Minor examination, have doubled the fee payable under it, yet have taken no steps to put the necessary education within the reach of our assistants. Is it not time for us, too, to change this phlebotomy treatment, and try what effect toning up and encouraging the younger members would have on the body politic? Certain it is that if we continue on the old course, and at the same time by our supineness, indifference, and lack of initiative keep our assistants from reaping the benefits, educational and financial, provided for them, we cannot expect that they will entertain any very kindly feelings towards a society that so treats them, or be induced to interest themselves in its work. If the Society does not rise to the occasion and do its duty, I have no doubt that in various parts there will be found societies or individuals who will endeavour to bring the benefits within the reach of those they are interested in, and there will thus arise a race of men with Honours certificates giving a qualification to teach; the question such persons will naturally ask themselves is, "Why should we have to pass a qualifying examination to the Pharmaceutical Society and pay ten guineas to them? Surely our qualification to teach is, or can readily be made, of such a character as to make it also a qualification to practise." There is no great difficulty to be surmounted in bringing this about; pressure from within, assisted by willing help, gladly given, no doubt, from without, will make the step easy of accomplishment, the more especially as the training gone through to obtain the certificate to teach is a very practical one.

The outcome of all this will be that the executive work at present entrusted to the Society by Parliament will be transferred entirely to a Government Department, and then we may inscribe "Ichabod" over our portals.

The Chairman said that they were deeply indebted to Mr. Paterson for having come all the way from the far North to give this paper. They understood that the Federation could not initiate proceedings in this matter, but he thought it a good paper to print *in toto* and circulate for discussion by the Associations.

A vote of thanks to Mr. Paterson finished this part of the business, Mr. Paterson offering, in his reply, to give members any further information they might desire.

A remit from the Huddersfield and District Chemists' Association in favour of the appointment of an Organising Secretary, as suggested by Mr. Lord Gifford, having fallen to the ground, as there was no delegate from the Association present, the meeting proceeded to discuss the question of

#### BREAKING BULK

of proprietaries, on a resolution forwarded by the West Ham District Chemists' Association as follows:

That the Association ask the Federation of Local Pharmaceutical Associations to obtain the opinion of the federated Associations as to the advisability of approaching the Board of Inland Revenue on the question of breaking bulk of proprietaries that have paid duty.

There was no delegate present from the West Ham Association, but Mr. Idris expressed a hope that they would allow a few words on the subject, and afterwards formally moved the adoption of the resolution. He thought it was a matter of great importance to the trade, and one in which they should approach the Inland Revenue authorities and try to get their reasons for this peculiar concession. Under this concession they could make fourteen sales to a 1s., 1½d. box of pills, and whereas the Revenue might obtain 1½d. out of every sale, they got one, thus throwing away a valuable source of revenue. It

showed to his mind the whole policy of the Civil Service to the trade, and they ought to bring it home to the public that if they wanted justice they ought to oppose the cutting of the stamp. (Applause.)

Mr. Jones, in seconding, objected to the breaking of bulk, which brought chemists down from the standard of professional men to the standard of the huckster. Speaking on the subject of the dignity of the trade, he referred to the sale of preventives, and said that the man who exposed these things in his window should be struck off the Register. (Hear, hear.)

Mr. Foggan said there was another reason why they should object to the practice of breaking bulk. If this were done in the case of pills and powders where there was no need for special caution, they might have the breaking of bulk in Winslow's syrup and other things containing scheduled poisons, which they could not put in a bottle or affix a label to.

Mr. Glyn-Jones pointed out that if it were within the knowledge of any association that anyone in their district was actually putting stamped proprietary articles originally stamped into pill-boxes, bottles, or any other enclosure, they only had to write to the Inland Revenue authorities to say that the practice was going on to have it stopped.

Mr. Brodie (Glasgow) said that he had wondered if the intention of the resolution was to advise the approaching of the Inland Revenue to obtain a further concession to enable them to break bulk, and he was glad to find that it was the other way. The terms of the resolution were somewhat vague. He had always set his face against the practice, and the only article in which he broke bulk was Steedman's powders; and in this case he had been obliged to do it because a neighbour of his did it.

Mr. Foggan remarked that in his town the licensed grocers and shopkeepers broke bulk, and as he refused to do so he lost sales.

The Hon. Secretary, referring to Mr. Brodie's remarks as to the terms of the remit, reminded the meeting that the Federation was not responsible for the wording of the resolution.

The motion was then adopted, the Chairman remarking that he was glad they in the North had little experience in this matter, but he was sure it was not in the interests of chemists to break bulk.

It was agreed as a matter of course that the next annual meeting be held at Brighton during the Conference week.

#### DEFAULTING ASSOCIATIONS.

Mr. Rowland asked if there was any rule to deal with defaulting associations, and on the Hon. Secretary expressing his regret that there was not, it was understood that this matter would be brought forward at the next annual meeting.

#### ELECTION OF EXECUTIVE.

Mr. Idris said that the Executive had done their work during the past year so well that the Federation could not do better than re-elect them, and he moved that the members be re-elected for the ensuing year, with the exception of Mr. Turner, who had resigned owing to severe illness. Mr. Hanson seconded, and Mr. Jones suggested the name of Mr. Foggan, Chairman of the Newcastle Association, in place of Mr. Turner.

The Hon. Secretary pointed out that the member resigned was elected for the South of England and Wales, in accordance with their system by which each district had a representative—(murmurs of "Territorial representation")—and suggested that a member should be appointed for that district.

Mr. Boorne, of Bristol, was proposed by Mr. Foggan, but he declined to serve; whereupon Mr. Glyn-Jones moved, and Mr. Hanson seconded, the appointment of Mr. Wippell Gadd, which was duly agreed to.

It was suggested that the appointment of auditors would be left with the Executive, but Mr. Idris laughingly objected to this, and suggested the re-appointment of Mr. Glyn-Jones and Mr. Jones, which was agreed to.

#### VOTES OF THANKS.

Mr. Jones moved a vote of thanks to the Executive for the admirable way in which they had done their work during the past year, and to the Chairman for presiding.

## Two Exhibitions.

### THE EXHIBITION OF HYGIENE

at the Grand Palais des Champs-Élysées, Paris, follows honourable and established precedent in not being completed till after the date of its official inauguration. However, there is plenty to see for one's modest franc—quite as much, in fact, as a holiday-tripping pharmacist will care to "do" in one visit. Those anxious to arrive at once at the pharmaceutical portion of the exhibits will do well to choose the entrance at the Champs-Élysées corner rather than go round to the grand portal. Here one is no sooner inside than infants' foods, surgical bandages, bottles of proprietaries, and artificial eyes stare one in the face. Here is Nestlé's stand, with the pretty figure groups of the mother leaning over her child's cradle and the paper-capped youngster in the baby-chair which has smiled on me from so many posters all over Europe. Nothing new, it is true, but all so fresh and pretty one looks again with pleasure. Then, turning into the side gallery which follows the Avenue Nicolas II., we enter the French pharmaceutical exhibit. It is still a little incomplete, but here, again, we find hosts of old friends and some prettily arranged shows. Fumouze frères prove how artistic and attractive one can make a collection of ovules and pessaries, and the case occupied by the "Lethicine Roger" has as its centrepiece a stuffed hen with her nest—a neat and effective manner of impressing the trade-mark on the mind of the passer-by. The exhibit of Hepp's "Dyspeptine" is illustrated by photos showing how the gastric juice is extracted from the living animal (pig). Guimet's dyes, Labelonye's and Leprince's specialities (proprietary), Midy's cascara and piperazine, Blancard's pills and syrup, are too familiar to need comment. The Syndicate of Grand Pharmacies have a collective exhibit—one Parisian firm and one pharmacist from each of eight or nine provincial centres, which seems an original idea. There are various mineral waters, Vichy being especially conspicuous, and many accessories—Paul's medical thermometers, Pascal and Rebières' scales and instruments of precision, several medico-electrical exhibits of some importance, etc. The wonders of radium and the x-rays will draw the public to this section—when the installations are terminated. The "Biberon Robert" (feeding-bottle) was of course well to the fore. Fraisse shows "Nevrosthénic serum" put up in ampoules (glass tubes with breakable ends). Peltot's cachets make kaleidoscopic combinations, and the historic Pharmacie Cadet-Gassicourt has an up-to-date exhibit. The Compagnie de Peroxydes, the Syrup Girolano Pagliano, and Lafonts and Jouisses' exhibits may be passed over, but Byla's stand can be mentioned as another proof of what a nice show can be made up of pharmaceuticals. In the hall outside, far from the madding crowd of his brother pharmacists, we found M. Fièvre showing his eucalyptus cigarettes (for asthma, miasma, etc.), and noted the yet unfinished cases of the Pharmacie Centrale, flanked by a grim figure in warlike uniform which turned out to be the dummy wearer of an oxygen-inhaling apparatus. Further on a lady appropriately presided over the "Lactagal" stand, the extract of the seed of one of the Malvaceae, destined to increase the efficiency of nursing mothers.

### THE BELGIAN SECTION.

is as important as one might expect, and does great credit to the active Commissary-General, M. Derneville, the Brussels pharmacist. One of the first things I noticed was a diploma and some volumes of the Proceedings of the Society of Pharmacy of Brussels, and M. Derneville's own exhibit is close by—some handy and well-stocked medicine-chests and portable pharmacies. M. Jonas, another well-known member of the same Society, shows his specialities, next to those of M. Bacq, of La Louvière. M. Rasson Lambrecht, of Brussels (medical glassware), and M. Vivarro, of Liège, complete the little group. A sort of Vendome Column of tins advertises the lactic preparations of Montzen. "Lusoforme" antiseptic, though shown here, appears to be a Swiss preparation. In the main hall "La Nutricia" announces a "mechanical process of fixing the globules of the cream in milk," which enables it to travel in hot climates, and withstand shaking during trans-

port; the address is Laeken (Brussels). M. Jean Bardin, a Brussels pharmacist, shows his "Formolsanitaire," a little apparatus which can be used indifferently as a disinfectant or insecticide. Noticing the inscription, "Filtration of drinking-water by Ferrochlore, Duyk's process, Howatson's system," we inquired if the inventor was the M. Duyk we all knew and appreciated as the Secretary of the 1897 International Pharmacy Congress at Brussels. Such turned out to be the case. M. Duyk has abandoned pharmacy, having been offered a post at the Belgian Ministry of Finance as analyst, and is now throwing his wonted energy into the question of water analysis and purification.

Before quitting the Belgians, Professor Mosselman's process for the destruction of dead animals by alkaline lyes as well as the large series of statistics, etc., of municipal hygiene and water-supply details, deserve mention.

### RUSSIA

has as much space as Belgium, and very characteristic and quaint are many of the stalls. But the only exhibit that need be mentioned here is that of the "Red Cross Society." A grim interest is given to these lifesize models of ambulances and panniers, stretchers and bandages, by the daily wires from the Far East. Especially noteworthy are the photos of the hospital-trains. In the "Maria Feodorovna" train we notice the tiny pharmacy, with its sterilising-apparatus and "Berkefeld Philtre"—this "Russian-French" orthography suggests rather love than war, but it is pure water, and not the fire of affection, which this filter produces.

We notice *coupés* for the doctor, the sisters, the priest and the commandant, but none for the pharmacist. Perhaps he is included in the "employés."

### THE BRADFORD EXHIBITION.

An inspection of this Exhibition, which is now in full swing and a great success, discloses a certain chemical and pharmaceutical interest. Although nominally an exhibition of local industries, it will repay the pharmacy student to visit it and closely examine the stalls. A really fine display is made by the Technical School; a specimen bottle of every chemical (crude and refined) used in the Bradford works is shown. These include turmeric, madder, cochineal, indigo, Persian berries, lac, sumach, logwood extract, myrabolans, fustic, cutch, and gambier from the vegetable kingdom, and the chemicals comprise blue vitriol, alum, potassium dichromate, titanium, potassium oxalate, stannous chloride, oxalic and tartaric acids, cream of tartar, sodium nitrite, acetic acid, lactic acid (coloured brown), formic acid, lignorodin, Turkey red oil, aniline, nitrobenzol, benzene, alizarine, naphthalene, anthracene, nitroalizerine, yellow alizarine, cyanene green, alizarine black and blue, tartarizin cyanol, artificial indigo, vidal black, diamine blue, acid violet, and naphthylamine. Complete sets of apparatus for the analyses of water, milk, air, metals, and other common objects are shown; a useful feature being a card for each, on which is displayed the process adopted for each article, and a mark to signify the proper apparatus to use. Distillation-processes, Soxhlets, fat-extractors (new form), and many other useful things are also to be viewed. At the "hygiene" stall an instructive display shows the composition of most articles of food and drink. The analysis of soap and its components are displayed and much besides. A stall "Bradford Botanical Garden and its Products" makes the pharmaceutical botanist hunger to see the gardens. "Bacteriology" is represented by a case sent by Dr. Evans, the medical officer of health; and Messrs. Reynolds & Branson show their great skill in bottling, labelling, and exhibiting all known specimens of bacteria, with apparatus showing how the work is done. Tubes show the action of microbes on gelatin. Mr. Parker, of Morecambe and Bradford, has a neat display of perfumes; Messrs. Harrison & Parkinson and Messrs. Reynolds & Branson have very extensive exhibits of colours apparatus (scientific and photographic). Messrs. Rimmington show waters of all kinds in syphons, and opportunity no doubt is allowed for sampling, as is the case with Messrs. Van Houten, at whose stall a cup of cocoa and a plate of biscuits or cake, with a sample packet of their "soluble cocoa," are given to all and sundry who require refreshment.



## Westminster Wisdom.

(From our Parliamentary Representative.)

### END OF THE SESSION.

The Session is over, and Parliament was prorogued on Monday to Thursday, November 3. Before the Prorogation took place, the Royal Assent was given to a large number of measures, including the Shop-hours Bill. This measure received the distinction of formal mention in the Speech from the Throne, the King intimating that "a Bill designed to facilitate the earlier closing of shops throughout the United Kingdom has received my assent."

### CASH ON DELIVERY.

In the fiftieth annual report of the Postmaster-General on the Post-office issued during the week the question of the introduction of the "cash on delivery" system is dealt with, Lord Stanley making some remarks favourable to it. The Postmaster-General mentions incidentally that the system would, if introduced, apply to registered letters and packets as well as to parcels sent by parcel-post. After alluding to the extensive adoption of the system in foreign countries, he mentions that proposals for its application to mails exchanged with this country have been made in several quarters, many of its advocates being of opinion that the absence of such a system places British traders at a disadvantage in international business. After careful study of the arguments *pro* and *con*, Lord Stanley finds advocates and opponents at one upon one point—that the system would be largely used by the public of this country, and that the only important objection rests on the anticipation of a diversion of trade from provincial retail traders to firms which advertise extensively. The opponents, he proceeds, do not, however, support this apprehension by evidence derived from actual experience in other countries; and numerous foreign Post-offices which he has consulted affirm that the system is in various ways useful to traders, and that it does not give rise to complaints on their part. The Postmaster-General concludes his treatment of the subject by remarking: "In these circumstances I am by no means satisfied, so far as my inquiries have gone, that the apprehensions expressed by retail traders in this country afford sufficient cause for withholding a convenience from the community at large."

### UNTAXED ALCOHOL.

The final constitution of the Committee appointed to consider the question of untaxed alcohol for manufacturing and other purposes was not quite settled when Parliament adjourned. I hear that Mr. Thomas Tyrer had a long consultation with the powers that be at the Treasury just before the House rose, and it is probable that the final decision will soon be made public.

### SHOP-HOURS BILL.

The passage of this Bill through the House of Lords was apparently somewhat hurried when the second reading came on on August 12.

Lord Belper regretted introducing the Bill at such a late hour, but added that "that fact is not of so much moment in regard to a Bill the substantial provisions of which have been considered on a previous occasion and to which both sides of the House have given their assent." The Bill did not, he said, seriously interfere with the working-hours of full-grown men. Shopkeepers have found it impossible to arrange voluntarily to close their shops because the whole object of the arrangement could be defeated by two or three shopkeepers. An overwhelming majority of the shopkeepers had pressed upon Parliament the necessity for legislation to remedy this state of affairs.

The Earl of Wemyss moved that it was inconsistent with the dignity and position of the House that a Bill which interferes with trade in streets as well as shops, and for the first time in modern legislation limits the working-hours of full-grown men, should be submitted when it could not possibly be adequately discussed. The Bill would affect not only the large co-operative stores, but also the small shop of the widow, and of a man and his wife, who employed nobody. In a free country that was monstrous. He protested against this special legislation and the want of

principle that pervaded their legislation in reference to this question.

Lord Avebury hoped the House would not agree to the resolution moved by his noble friend. His noble friend's speech was a travesty of the Bill. The Bill did not interfere with trade or with adult labour. All who were really interested in the Bill desired that it should become law. Shopkeepers all over the country were almost unanimously in favour of this Bill. The only objection some of them had to the measure was that it did not go far enough. Some of the provisions intended as safeguards he would have been glad to see omitted. They seemed cumbersome and unnecessary, and might introduce difficulties. He regretted also that, as regarded London, the borough councils had been substituted for the County Council, not that he had not every confidence in the borough councils, but their intersecting boundaries would create a difficulty where one side of a street was in one borough and the other in an adjoining borough where different hours were adopted. It was impossible now to propose amendments, and he had confidence that his Majesty's Government would introduce an amending Bill in another Session. The measure would do good even where it was not actually put into force, because no pressure could now be put on one obstinate shopkeeper who resisted the wishes of all his neighbours; but henceforth he could be told that if he would not act with them there would be an appeal to the local authority, and this in many cases would be effective. The measure would confer an immense boon on our towns and cities, and bring much happiness into the lives of the shopkeeping community.

The Marquis of Ripon was in favour of the Bill, but expressed sympathy with the protest against the passing of so many measures by the suspension of the Standing Orders.

Lord Balfour said the principle sometimes applied to private Bills of carrying them over from one Session to another would remedy the present system. For instance, what harm would be done to any public interest if the Shop-hours Bill were carried over to next Session? As to the principle of that Bill, he thought it would inflict a great injustice on small shopkeepers if it were passed. No one was injured by permitting these people to sit in their back parlours reading the newspapers while waiting for a customer after the large shops in the district had closed.

The Marquis of Lansdowne and the Duke of Northumberland had something to say in regard to the late hour at which Bills were sent up from the Commons, and after a division on the Earl of Wemyss's resolution the Bill was read a second time. On August 15 the Bill passed through Committee and was reported to the House without amendment. The Bill was then read a third time and passed.

### STORES AND INCOME-TAX.

Mr. Field having asked whether his attention had been directed to the complaint of traders respecting the exemption of Army and Navy and Civil Service stores and co-operative societies from the payment of income-tax on profits, whether he could state upon what grounds those trading associations were exempted, and whether he would consider the advisability of placing co-operative business societies upon the same basis as others in similar trades, the Chancellor of the Exchequer says: There is no exemption from income-tax granted, as is popularly supposed, to co-operative societies or their members. In only one respect does their position with regard to the tax differ from that of the ordinary society or company. The ordinary society or company deducts income-tax from the member's or shareholder's dividend before it is paid over to him, leaving it to him either to bear the tax or to reclaim the amount deducted from the Inland Revenue authorities, if his income falls within the limit of exemption. In the case of co-operative societies, most of the members are working men whose incomes fall within the limit. Accordingly, to deduct income-tax in their case from the dividend before paying it over would involve nearly all the members claiming repayment. Nothing would be gained to the revenue, and infinite annoyance and trouble would be given both to those who had to make the claim and to the Revenue officials in dealing with the enormous number of claims so

made. It is therefore provided that, if certain conditions are satisfied, income-tax need not be deducted from the profits of co-operative societies before their distribution as dividends to individual members. No exemption, however, is given, as every individual member whose income is above the exemption line is liable to the tax on his share of those profits when received by him. The Army and Navy Co-operative Society (Limited) and Civil Service Co-operative Society (Limited), to which the hon. member refers, do not fulfil the necessary conditions, and are therefore directly assessed to the income-tax.

#### MEDICAL AND DENTAL COMPANIES.

The following are the medical and dental companies mentioned in the return of such companies to which reference was made in the *C. & D.*, August 13, page 340:

##### *England and Wales.*

**Medical Companies.**—Assurance Agents' Medical Aid Company (Limited), 35A Manchester Street, Liverpool; Bolingbroke Hospital (Incorporated), Bolingbroke House, Wandsworth Common, S.W.; Dean Drug Company (Limited), 25 Abchurch Lane, Mansion House, E.C.; Electrical Treatment Association (Limited), 4 Harrington Street, Castle Street, Liverpool; Electro Institute (Limited), 26 Charles Street, Haymarket, W.; Hampstead General Hospital, 4 South Hill Park Road, Hampstead; Hospital for Epilepsy and Paralysis and other Diseases of the Nervous System (Incorporated), 4 Maida Vale, W.; Ison's Eye and Ear Dispensary (Limited), 71 Great George Street, Leeds; Light Cure and Electro-Therapeutic Institute (Limited), 47 and 48 Dover Street, Piccadilly, W.; Metropolitan Provident Medical Association, 5 Lamb's Conduit Street, Bloomsbury, W.C.; Modern Curative Treatment (Limited) (no reg. office); Naturopathic Institute (Limited), 5 Harrington Gardens, South Kensington; Premier Medical Aid Association (Limited), 2 Bear Alley, Farringdon Street, E.C.; Victoria Eye and Ear Hospital (Incorporated), Hereford, Eign Street, Hereford; Wirral Homoeopathic Dispensary, 23 Hamilton Square, Birkenhead.

**Dental Companies.**—A. Greenhalgh & Son (Limited), 33 Manchester Road, Bury; Albert & Son (Limited), 16 Ludgate Hill, E.C.; Allbright English Dental Institute (Limited), 42 Bishopsgate Street Without, E.C.; American Association of Painless Dentistry (Limited), 34 Regent Street, Piccadilly, W.; American Dental Institute (Limited), 8 Arlington Street, S.W.; American Tooth and Crown Depot (Limited), 41 Market Street, Manchester; Anglo-American Artificial Teeth and Dental Association (Limited), 37 Great Tower Street, E.C.; Anthony, Dentists (Cardiff) (Limited), St. Tydfil Chambers, 110 Queen Street, Cardiff; Archer Johnson (Limited), 90 Ecclesall Road, Sheffield; Archie E. Slack (Limited), Wentworth Chambers, 43 High Street, Rotherham; Artificial Teeth Association (Limited), 37 Grey Road, Walton, Liverpool; Artistic Dental Company (Limited), 41 Little Horton Lane, Bradford; Beardmores (Limited), 6 King Street, Wolverhampton; Biltcliffe Dental Company (Limited), 54 Bradford Road, Dewsbury; Bowman-Smith (Limited), 46 Erleigh Road, Redlands, Reading; Brompton Dental Institute (Limited), 35 Brompton Road, South Kensington, S.W.; Carew's (Limited), 8 Queen Street, Cardiff; Colonial Dental Company (Limited), 8 South Terrace, London Road, Neath; Cook & Thompson's Dental Company (Limited), 2 St. Paul's Gardens, Spennymoor, co. Durham; Coopers (Cardiff) (Limited), 171 Castle Road, Cardiff; County Dental Association (Limited), 32 Water Street, Rhyl; Cross & Allen, 21 High Street, Redhill; Cullwicks (Limited), 42 Dudley Street, Wolverhampton; E. H. Richards (Limited), 244 Gipsy Lane, Forest Gate, Essex; East Kent Dental Institute (Limited) (no reg. office); Edward England (Limited), Brecknock House, Tudor Square, Tenby; Edwards & Williams Dental Company (Limited) (no reg. office); Edwards Dental Company (Limited) (no reg. office); English Dental Company (Limited), 109 Walton Street, Oxford; Eskill & Company (Limited), 13 Hanover Street, Hanover Square, W.; F. Butterfield (Limited), 6 King Street, Oldham; Foleys (Limited), 75 Westbourne Grove, W.; Fulham Dental Parlors (Limited), 531 Fulham Road, S.W.; G. H. Nickolds (Limited), 38 George Street, Croydon; Goodmans (Limited), 2 Ludgate Hill, E.C.; Grundy's (Limited), 1 Edward Street, Chorley, Lancashire; H. E. Field (Limited), 88 Oxtou Road, Birkenhead; H. W. Greatbatch (Limited), 153 Burton Road, West Didsbury; Hanlons Dental Company (Limited), Dove-dale, King's Avenue, Wellington Road, Rhyl; Hennan & Co. (Limited), 49A Eanam, Blackburn; J. H. H. Loft (Limited), Carlingford House, Sale, Cheshire; J. L. B. Miller (Limited), 255 New Cross Road, S.E.; J. R. Taylor (Limited), Back Bridge Street, Bacup; London and Colonial Dental Company (Limited), Norfolk House, 153 Eyre Street, Sheffield; London and Provincial Artificial Tooth Company (Limited), 11 Old Jewry Chambers, E.C.; London Drug and Dental Company (Limited), 10 New Broad Street, E.C.; McBreen's (Limited), 59 Mesnes Street, Wigan; Meads (Limited), 41 Burdett Road,

Bow, E.; Molars (Limited), 20 High Street, Birmingham; Morgan, Dentists (Limited), 21 Nicholas Street, Bristol; R. C. Morris (Limited), Medical Hall, Teme Street, Tenbury; Reynolds & Sons, Dentists (Limited), 91 Newport Street, Bolton; Robinsons, English and American Teeth (Limited), 62 Bishopsgate Street Within, E.C.; Robinsons (of London and New York) (Limited), 16 Poultry, E.C.; Sansome's Dental Company (Limited), 14 Clarence Place, Newport, Mon.; Smith's Dental Institute (Limited), 7 Market Street, Guildford; Southsea Artificial Tooth Company (Limited), 13 Castle Road, Southsea; Sutton Gardner (Limited), 1 Flint Street, Leicester; T. Burnett & Co. (Limited), 2 Monson Street, Lincoln; Tacey & Holmes, English and American Teeth (Limited), 1 Egerton Street, Wrexham; Vickary's (Limited), 112 Kingsland High Street, London, N.E.; W. Bates & Co. (Limited), 50 Oxford Street, Southampton; W. H. Baker, Surgeon-Dentists (Limited), 5 Market Street, Crediton; W. T. Symes (Limited), 66 Stokes Croft, Bristol; West Central Dental Institute (Limited), 2 Tavistock Chambers, Museum Street, W.C.

**Medical and Dental Companies.**—Macdonald Dental and Medical Company (Limited), 33 Piccadilly, Manchester; Macdonalds (Liverpool) (Limited), 69 Church Street, Liverpool; Macdonalds (Manchester) (Limited), 29 Piccadilly, Manchester; Macdonalds (Provincial) (Limited), 4 South Parade, Rochdale.

##### *Scotland.*

There are no medical companies.

**Dental Companies.**—Messrs. Tracey (Limited), 3 West Campbell Street, Glasgow; Bryan's (Limited), 389 Springburn Road, Glasgow; Wilkinson's Teeth Extracting and Adapting Company (Limited), 67 Bank Street, Coatbridge.

##### *Ireland.*

There are no medical companies.

**Dental Companies.**—Incorporated Dental Hospital of Ireland, 26 to 29 Lincoln Place, Dublin; Hoyland (Limited), 65 Dublin Road, Belfast; Jaffe, Surgeon-Dentist (Limited), 43 Cecil Street, Limerick; E. Donaghey (Limited), 6 Fitz-william Street, Belfast; Myddelton's (Limited), 2 Crumlin Road, Belfast; W. James (Limited), 13 South Mall, Cork; E. C. Williams (Limited), 65 Duncairn Street, Belfast; Jaffe & Co., British American Dentistry (Limited), 19 Upper Mal-low Street, Limerick; William Steyn, Dentists (Limited), 25 Rathmines Road, Dublin; Boston Dental Association (Limited), 51 Grafton Street, Dublin; London and American Dentists (Limited), 31 Harcourt Street, Dublin; Henry J. Bradlaw, Surgeon-Dentist (Limited), 78 Harcourt Street, Dublin; Irish American Dental Surgeons (Limited), 4 Harrington Street, Dublin; New York Dentists (Limited), 41 South Mall, Cork; H. S. Gibbons (Limited), 33 Grand Parade, Cork; National Dental Institute of Ireland (Limited), 25 Suffolk Street, Dublin; Rupert A. Hackett, Dentist (Limited), 90 South Mall, Cork; Mr. Appleton, Surgeon-Dentist (Limited), 5 Dufferin Crescent, Bangor, co. Down; Joseph F. Warren, Surgeon-Dentist (Limited), 67 Amiens Street, Dublin; A. Boursin, Surgeon-Dentists (Limited), Nelson Street, Tralee; Clonmel Dental Company (Limited), 3 Grubb's Court, Clonmel; Mr. Warren Wise, Surgeon-Dentist (Limited), 3 Jail Street, Ennis.

## Deed of Arrangement.

**Grime, James**, 315 Bolton Road, Darwen, Druggist and Drysalter. Trustee, James H. Bury, Darwen, accountant. Dated August 9. Filed August 13. Secured creditors, 974*l.*; liabilities unsecured, 1,008*l.* 1*s.* 10*d.*; estimated net assets, 274*l.* 16*s.* 7*d.*. Among the trade creditors are J. Woolley, Sons & Co., Manchester (21*l.*), and Bleasdale (Limited), York (19*l.*).

## New Companies & Company News.

**AQUILA SYNDICATE (LIMITED).**—Capital 1,000*l.*, in 1*l.* shares. Objects: To acquire the patent for Great Britain and Ireland dated January 10, 1904, granted to T. Parziale, for improvements in the manufacture of soap, and to carry on the business of manufacturers of soap of all kinds, etc. Registered Office, 35 Walbrook, E.C.

**SOUTHERN OIL-FIELDS OF RUSSIA (LIMITED).**—Capital 100,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with Lord Armstrong, to explore for, win, obtain, treat, refine and render marketable naphtha, petroleum, oil, and other products, and to carry on the business of workers, miners, and raisers of naphtha, petroleum, oils, gold and other products, ores, metals, minerals, and precious stones, etc. No initial public issue. The subscribers are to appoint the first directors; qualification, 100 shares; remuneration, 150*l.* each per annum. Registered Office, 4 Suffolk Street, Pall Mall East, S.W.





**TO CORRESPONDENTS.**—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

#### The Glyn-Jones Testimonial Fund.

SIR,—Will you kindly permit me, through your columns, to report progress regarding above? The Organising Committee sent out, more than a month ago, over nine thousand circulars to chemists and others inviting contributions. Up to the present 360 have responded. I cannot regard that as satisfactory, and there is reason to fear that the ultimate response will be proportionately meagre unless those who wish to subscribe do so before it passes out of their minds. No doubt a large number of intending subscribers consider there is no hurry, and are keeping back till nearer the time. I trust, however, they will not delay, as a rush of subscriptions and correspondence during the last week or two would be very inconvenient to deal with.

If anyone who reads this has mislaid the particulars of the scheme, or if any reader has not received a circular, I shall be happy to forward a copy on receipt of name and address.

I have to announce that the following have kindly consented to their names being added to the Organising Committee: Messrs. Alfred Bishop & Sons (Limited), Spelman Street, N.E.; Howards & Sons, Stratford, E.; Neve, Beck & Kirby, solicitors, Lime Street, E.C.

Yours faithfully,

GEO. R. BARCLAY,

Hon. Secretary.

95 Farringdon Street, E.C., August 17.

#### Use of Drugs in Sight-testing.

SIR,—Your correspondent "Quaero" (*C. & D.*, August 13) ventilates a grievance in connection with the conditions upon which the S.M.C. diploma is granted which is far more apparent than real. Dilation of the pupil of the eye, even in young children, can be obtained with a little patience in the dark room in 90 per cent. of cases without a mydriatic, and a good many experienced opticians lean strongly to the opinion that corrections given without the use of mydriatics or cycloplegics, are far more permanently comfortable. I trust there are very few holders of the sight-testing diploma who would "confess to customers that we cannot undertake to fit young children; you must go to a doctor." The regulation of the S.M.C. forbidding diploma-holders to use drugs to paralyse accommodation is a particularly useful one in the case of chemist-opticians, whose familiarity with drugs and the fact that he is constantly surrounded by the whole Pharmacopœia affords a powerful temptation to degenerate from reputable opticians into arrant quack doctors. There is no regulation of the S.M.C. authorities forbidding the use of patience, and this is far more useful to an optician than mydriatics.

Yours faithfully,

F.S.M.C. (216/31.)

#### To Qualify as a Medical Man.

SIR,—I was much interested in your article in this week's *C. & D.* on the practice of medicine, especially the narrative by the chemist and druggist of thirteen years' standing who has now qualified under the English Conjoint Board. I find this gentleman makes a mistake in stating that the only difference which exists between a University Prelim. exam. (*i.e.*, a matriculation) and the Medical Prelim. of the G.M.C. is that in the former "mechanics" is a compulsory subject. It is only so in the Manchester Victoria University; I believe that in all other similar examinations it is an optional subject. Chemistry, botany, etc., may be taken in lieu of it. I should like also to point out to would-be medical students that the above gentleman's estimate of medical education, 379*l.* 11*s.*, does not include the board and lodging required for the five years, which will considerably increase the above amount.

In my own case I took the College of Preceptors' Prelim. some time ago, and I shall commence work for both the first year's Conjoint Board exam. and the Minor at the beginning of next session. There are many chemists' assistants like myself who are dissatisfied with the present conditions of pharmacy, and desire something better, and are deterred from studying medicine by the five years' curriculum; but I should like to impress upon those gentlemen that it is possible to do the first year's Conjoint work and the Minor at the same time. Then the student has but four or in some cases three and a half years remaining of his curriculum, but of course it is essential that the whole of the work shall be carried out at a recognised school. I should advise men like myself to take the Minor, because, should anything unforeseen happen during his curriculum, the student, if necessary, can fall back on the Minor qualification.

In your article on Cambridge degrees I should like to point out that a transposition has taken place. Professor Howden is secretary of the Durham College of Medicine, Newcastle-on-Tyne, not Cambridge.

Yours faithfully,

J. P. WILLIAMS.

SIR,—Your medical correspondent's letter in the Educational issue of the *C. & D.* showing the many details necessary for a chemist who would take the medical curriculum will be of great interest to most of us. The drawback with many chemists is the Preliminary examination. Many chemists also are practical dentists, and would no doubt take the Dental L.D.S. but for "that Preliminary." One would have thought that the Minor certificate of the present day would be sufficient guarantee at least to cover the medical or dental Preliminary, when probably the chemistry and physics taken for the first professional dental are not as stringent as those required for a chemist.

Yours, etc.,

MATRIC. (216/51.)

#### Letters in Brief.

**THE BLACKBURN MINOR COURSE.**—*Mr. J. Hindle* writes, in reference to the classes for the Minor examination at the Blackburn Municipal Technical School, that the classes in pharmaceutical subjects have had to be discontinued owing to an *impasse* with the school authorities. Chemistry and physics classes are still available.

**THE VALUE OF THE "C. & D."**—*J. G. D.* (88/36) writes: "I think it is only fair to say that I have found the *C. & D.* most valuable in various ways. I commenced to take it at first just as an experiment, but now feel I cannot do without it. I always look at the advertisements, and on one order alone I saved 2*s.* entirely through the *C. & D.*; yet I was buying well before. I have saved the annual subscription over and over again. Please find cash enclosed for ensuing year."

**CLEANING WEIGHTS.**—*Sigma* (215/30) writes: "I am very much obliged to you for your replies to my numerous queries recently. Curiously enough a few days after your reply about cleaning rusty weights and scales, the inspector called, and advised me before sending them down to be adjusted to boil them in a solution of washing-soda, dry, and then apply dry blacklead. This I did, and it answers so admirably that I thought it might be a useful hint for some of your readers. The weights and scales were very rusty from being kept and used in the cellar for whitening and dry colours."

#### Information Wanted.

Postcard replies to any of subjoined inquiries will be esteemed.

- 216/54. Address of makers of Phillips' ear-drums.
- 218/23. Agents or makers of "Klondyke" gold paint.
- 215/49. Makers of, or agents for, the "Ben Davis" throat-pastilles.
- 216/61. Makers of "Valenta" (or article of similar name), used as a food for foals and colts.
- 219/65. Address of Sutherland & Co., wholesale perfumers, believed to be either at Manchester or Liverpool.
- 215/32. Makers of felt bags with cords, for carrying tumblers, as used by water-drinkers at Buxton and Harrogate.
- 216/43. Who are the makers or agents for Rosseter's hair-restorer, Besosa's hair-restorer, and Ulrici's "Cerebrine" wine?

## Trade Report.

**NOTICE TO BUYERS.**—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., August 18.

**B**USINESS in drugs and chemicals is quieter this week, orders being mostly of a retail character. There is, however, a healthy undertone in the markets generally, and with the approach of autumn there are many who look for an improvement in business. The chief alteration has been an unexpected reduction in quinine on the part of makers, which has somewhat upset second-hand calculations. German refined camphor has been reduced owing to a more liberal supply of crude on the Hamburg market. Belgian chamomiles have again advanced, and first pickings are now very scarce. Ergot and orange-peel are also dearer, and in coriander-seed a good business has been done at higher rates. Tragacanth continues to sell well at the advance noted last week, especially the low and medium grades of Bagdad. Reports are current concerning a short crop of wormseed in Russia, which may eventually affect the price of santonin. Among articles showing an easier tendency are citric acid, ordinary sulphate of copper, carbonate of ammonia, and rosin. All potato-products are very firm, especially farina and dextrin. Subjoined are the principal alterations of the week.

Higher	Firmer	Easier	Lower
Chamomiles	Senna (Tinn.)	Acid, citric	Camphor
Coriander	Wormseed	Ammonia	(German ref.)
Ergot	Wax, bees'	carbonate	Kino
Golden-seal	(Jam.)	Copper	Menthol
Orange-peel		sulphate	Quinine
Rhubarb		Oil, pepper-	Tonka beans
(native H.D.)		mint (Jap.)	
Tragacanth		Pimento	
		Rosin	
		Sarsaparilla	
		Wax, bees'	
		(Zan.)	
		Wax,	
		Japanese	

### Cablegrams.

SMYRNA, August 17 :—The sales of opium for the week ending Wednesday amount to 150 cases for the United States and Germany, at the equivalent of from 6s. 6d. to 7s. 3d. per lb., f.o.b. Market closes strong.

HAMBURG, August 18 :—Business here is dull. Ergot has advanced to 350m. per 100 kilos. HGH American oil of peppermint is unaltered at 17m. per lb., and star-anised oil is quoted at 11m. per kilo.

NEW YORK, August 18 :—Quiet conditions prevail here. Opium continues slow of sale, at \$2.65 per lb. for single cases. Quinine has been reduced to 21c. per oz. Ergot is firmer, at 33c. per lb. Senega has advanced to 70c., and for golden seal (hydrastis) \$1.35 is now asked, the market being bare of stock. Peppermint is rather firmer at \$3.45 for bulk oil. Mexican sarsaparilla is strong, at 12c. per lb., and for cascara sagrada 8½c. is asked, being firm.

### Arrivals.

The following drugs, chemicals, &c., have arrived at the principal ports of the United Kingdom from August 11 to 17, inclusive: Acetone (@ Fiume), 10; acid, carbolic (@ Amsterdam), 142 cks., (@ Rotterdam) 50 cks.; acid, lactic (@ Rotterdam), 15 cks. 1 cs.; acid, tartaric (@ Bordeaux), 8, (@ Rotterdam) 33; albumen (@ Havre), 25; alcohol, wood (@ Philadelphia), 140 dms.; aloes (@ Mossel Bay), 40 cs.; arrowroot, (@ Halifax, N.S.) 50 kgs., (@ St. Vincent) 118 pkgs.; arsenic

(@ Antwerp), 53; balsam copaiba (@ Para), 4; benzoin (@ Singapore), 126; bleaching-powder (@ Rotterdam), 31; borax (@ Buenos Ayres), 1,216; Calabar beans (@ W. C. Africa), 8; camphor (@ Havre), 75; canary-seed (@ Mazagan) 700, (@ Valencia) 150; cardamoms (@ Colombo), 23; caraway-seed, (@ Harlingen) 87, (@ Rotterdam) 120; cascara sagrada (@ New York), 568; chloral hydrate (@ Rotterdam), 180 botts.; cinnamon (@ Colombo), 105; drugs (@ New York), 275 cs. 82 pkgs.; fennel-seed (@ Salonica), 80; formaldehyde (@ Flushing), 20; galls (@ Antwerp), 50 cs.; ginger, (@ Hong Kong) 268 cs. 400 pkgs., (@ W. C. Africa) 194, (@ Bombay) 302; gum arabic (@ Bombay), 50; gum copal (@ Amsterdam), 212; honey (@ St. Lucia), 19; insect-powder (@ Trieste), 15; kola, (@ Jamaica) 15, (@ Colombo) 4; lime-juice, (@ Jamaica) 32, (@ Dominica) 8; liquorice (@ Batoum), 300 cs.; oil, castor (@ Antwerp), 23; oil, cod-liver, (@ Aalesund) 20, (@ Bergen) 65; oil, lemon (@ Palermo), 9; oils, essential (@ Messina), 131; oil, wood, (@ Shanghai) 29, (@ W. C. Africa) 35; opium, (@ Marseilles) 18, (@ Salonica) 129, (@ Constantinople) 17; pepper, white (@ Singapore), 195; potash, permanganate (@ Hamburg), 15; roots and barks (@ New York), 30; saccharin (@ Antwerp), 40 cks.; sal ammoniac (@ Amsterdam), 46; sarsaparilla (@ Havre), 12; shellac, 636; button lac, 40; soda crystals (@ Ghent), 375; spices (@ Grenada), 17; sticlac (@ Marseilles) 21, (@ Calcutta) 24; squill (@ Messina), 20; tartar, (@ Bari) 132, (@ Rotterdam) 27, (@ Bordeaux), 15; vanilla (@ Marseilles), 18 cs.; wax, bees (@ Marseilles) 7, (@ Spain) 59, (@ Calcutta) 10, (@ Jamaica) 12, (@ W. C. Africa) 26, (@ Tangier) 25, (@ Bombay) 34; wax, carnauba (@ Hamburg), 11; wax, mineral (@ Havre), 20; wax, paraffin (@ Baltimore), 240; zinc chloride (@ Hamburg), 10.

### Liverpool Drug-market.

Liverpool, August 17.

AFRICAN GINGER is now held for 20s. 6d. per cwt., though possibly 20s. would be taken.

BEESWAX.—Nine bags Chilian have been sold at 7l. 8s. per cwt., and 2 bags at 7l. 12s. 6d.

CALABAR BEANS.—Four bags have been sold at 3d. per lb.

CANARY-SEED.—One hundred bags Turkish have been sold at 79s. per qr.

CASTOR OIL.—Good seconds Calcutta is in rather more inquiry for spot parcels with sales at 2½d. per lb. from the quay, and 2½d. in store; for shipment, 2½d. is now talked of. First-pressure French remains unchanged at 2½d. on the spot, and 2½d. to 2½d. 10s. per ton f.o.b. Marseilles.

CHAMOMILES.—New-crop is reported to be very small, and only a limited quantity offers at 80s. per cwt. net, f.o.b., gross for net; for old flowers 61s. to 65s. per cwt. is now wanted.

CHILIAN HONEY.—Twenty kegs of Pile 1 have been sold at 25s. per cwt.

CORIANDER-SEED.—Fine quality has again advanced to 22s. 6d. per cwt.

ERGOT.—Hamburg agents report that new-crop Spanish is likely to be short, and 1s. 6d., c.i.f., is now wanted. Russian has also advanced to 1s. 4½d. per lb., c.i.f.

GUARANA.—Four cases have been sold at 2s. 4½d. per lb.

SENEGA continues very firm, at 2s. 11d. per lb., c.i.f., from New York.

TURPENTINE continues steady, at 41s. 9d. per cwt.

### German Drug-market.

Hamburg, August 16.

Business is still very quiet, and there are only few changes of interest since last week.

ANISEED is firm, at 37m. to 38m. per 100 kilos.

CAMPHOR.—Refined has been reduced; first-hand is now quoted 525m. per 100 kilos., and second-hand is offered at 520m. per 100 kilos.

ERGOT is tending firmer, as only small crops are reported owing to the drought in Spain and Russia. Spot is quoted 300m. per 100 kilos.

GOLDEN SEAL is rising, and the value to-day is 13m. per kilo. IPECACUANHA shows very little business. Rio is quoted 11m. to 10½m., and Cartagena 10m. to 9½m. per kilo.

JALAP is quiet, at 90m. per 100 kilos.

JAPANESE WAX is also quiet, at 112m. to 110m. per 100 kilos.

LYCOPodium is firm and scarce, at 650m. per 100 kilos.

MENTHOL on the spot is quoted 29m., and for shipment 27m. per kilo.

OILS, FIXED.—Castor is firm, at 43½m. per 100 kilos, for first-pressing. Non-congealing cod-liver is quoted 160m. per barrel. Linseed is quiet, and cotton steady.

OILS, ESSENTIAL.—Peppermint is firmer from America; HGH is held at 16m. per lb. on the spot. Japanese is quiet, at 11m. per kilo. Star-aniseed is quoted 10½m. per kilo. Camphor oil is lower, with sellers at 80m. per 100 kilos.

SENEGA is firm, Western root offering at 675m. to 700m. per 100 kilos.

STAR-ANISEED is very cheap at 110m. per 100 kilos.



**Japanese Drug and Chemical Markets.***Yokohama, July 21.*

Our drug market is recovering from a period of depression, owing to the brisk demand and large purchases which are being made by the Japanese Government.

In export articles, menthol is firm at 10.50 yen per catty. Refined camphor is very firm owing to brisk demand and light supply; 1-oz. tablets are quoted at 1.05 yen to 1.09 yen per lb., and large quantities are unobtainable on the spot. September to October delivery is quoted at 1.10 yen per lb. Iodides are firm all round. Dried ginger is wanted at 8.50 yen per picul, but there are no important transactions.

In import goods, bismuth subnit. is very firm at 4 yen per lb., the Government having purchased 12,000 lbs. since June 1, and are still buying; consequently the stock is decreasing, and at Yokohama it is estimated at 20,000 lbs. only. Cocaine hydrochloride is also very firm at 7 yen per oz., with good demand in face of light supply. Beechwood creosote is firm at 150 yen per lb. The Government has purchased some 15 tons since the beginning of February, which is being used for some special purpose. Potassium bromide is firm, at 90 sen per lb., on account of light stock and higher advices from the primary market. Santonin is firm, at 13.50 yen per lb.; the stock is only 500 kilos, but on account of the too high price demand is exceedingly dull. Ipecacuanha is in very poor demand, nominal price being 3.40 yen per lb. for best Rio root. Carbolic acid is lifeless, owing to heavy stock and slackness of demand; nominal price is 30 to 29 sen per lb. for large quantities; the stock is about 2,000 cwt. Saffron is dull, at 24 yen per catty. Sugar of milk is low in price, at 31 yen per cwt.; demand is but slight.

In heavy chemicals, the price of soda-bicarb. has been advanced considerably by B. M. & Co., who now quote 4 yen per cwt. in kegs; for 60 per cent. caustic soda 7 yen; and for alkali 4.10 yen per picul.

**Japanese Iodine.**

The market for Japanese iodine is firmly held, writes our Japanese correspondent under date of July 21, and fairly large transactions have been made at prices ranging from 4.35 yen to 4.45 yen per lb. for 100 per cent. Some 5,000 lbs. changed hands at the above-mentioned prices for export during this month. The export of iodide of potassium from January to May amounted to 45,000 lbs. The production this year is estimated at 150,000 lbs. to 170,000 lbs., and raw material is now coming forward freely. There are no cheap sellers, however, owing probably to the brisk demand. Holders are now quoting 4.55 yen to 4.60 yen per lb. of 100 per cent. crude, but buyers are not willing to pay more than 4.35 yen per lb. Iodide of potassium is selling well at from 4.10 yen to 4.15 yen per lb., and iodoform at 6.15 yen per lb., the latter being in very brisk demand on Government account. Judging from the present situation of the market, there is not likely to be any large fluctuation in favour of buyers.

**The Russian Worm-seed Crop.**

A London agent has received the following advice from his principals on the Continent: "My friends in Asia write that the prospects for the forthcoming crop of wormseed are becoming worse and worse, owing to the periods of very hot weather that have prevailed, and the steppes are reported to be as dry as tinder. It is only in some deep valleys that the plant shows any progress, and it is not expected that the total yield will be more than 10,000 to 12,000 poods (1 pood=about 36 English lbs.). If it had not been for the good harvests of 1899 and 1900, matters would have become critical for the manufacturers of santonin; but even the stocks of these years are now very small, and it will only be possible to manufacture small quantities of santonin this year for lack of raw material, having no guarantee that a good harvest next year will improve prices. Wormseed will possibly again advance shortly."

We have also been favoured with the following from another source: "We have received advices from the growing district that this year's crop is a failure owing to the great drought this summer. All the highlands have been practically burnt up, and only in some of the valleys has any seed been harvested; in all about 12,000 poods—scarcely a quarter-crop. Owing to the small stocks left over from the two previous seasons, it is highly probable that the future course of the market for santonin will be seriously affected, and we therefore suggest a purchase now, as a further and probably material advance is daily expected. Santonin is now exclusively made in Russia, and is controlled by the Government, who levy an export-duty on both the raw material and finished product."

ACETANILIDE is unaltered, at 8 $\frac{3}{4}$ d. to 9d. per lb., according to quantity.

ACID, CITRIC.—Quiet, at 1s. to 1s. 0 $\frac{1}{4}$ d. per lb.

ACIDS.—Hydrochloric B.P. is quoted from 16s. 6d. to 18s. 6d. per cwt. Nitric, B.P., 3d. to 3 $\frac{1}{4}$ d. per lb. Sulphuric, B.P., 2 $\frac{1}{2}$ d. to 2 $\frac{3}{4}$ d. per lb. Hydrobromic dil., B.P., 10 per cent., 5 $\frac{1}{4}$ d. to 5 $\frac{1}{2}$ d. per lb. Chromic (for batteries), 7 $\frac{1}{2}$ d. to 8d. per lb. Phosphoric conc., B.P., 8 $\frac{3}{4}$ d. to 9d. Boric, crystals 22s., and powder 24s. per cwt.

ALMONDS.—In Sicily the crop is reported scarce everywhere; growers refuse to sell at the moment, and prices have further advanced. P. and G. sweet is quoted at 72s. 6d., bitter 74s., for prompt delivery; and Avola current 87s. 3d., and choice ditto, 94s. 3d. per cwt. of 50 $\frac{3}{4}$  kilos., f.o.b., for September-October shipment.

AMMONIA.—Carbonate is rather easier at 3 $\frac{3}{4}$ d. per lb. net in casks of 2 to 5 cwt., less 7 $\frac{1}{2}$  per cent.

CAFFEINE.—Pure B.P. crystals are quoted at from 9s. to 9s. 9d. per lb., and citrate at from 6s. 3d. to 7s., net, according to quantity.

CAMPHOR.—The German refiners announce a reduction of 1d. per lb., and now quote 2s. 4 $\frac{3}{4}$ d. per lb. for 1-ton lots of bells, second-hands quoting slightly less. There has been an arrival of crude in Hamburg, which has enabled makers to effect the reduction. In auction Japanese refined  $\frac{1}{4}$ -oz. tablets were held at 2s. 5d. and  $\frac{1}{2}$ -oz. at 2s. 6d. per lb.

CANARY-SEED.—Very firm, with a good business at 76s. per qr. for Turkish, and 78s. for Saffi and Mazagan; but 80s. is now the quotation.

CANTHARIDES.—There are still no supplies of the new Russian flies, but the dealers hope to be in a position to offer shortly.

CHAMOMILES continue to advance, and early this week one agent was quoting 83s. for new Belgian of first pickings, with very little to be had at this figure. Old flowers are also much firmer, at from 42s. 6d. to 55s. per cwt., and some small lots have changed hands at about these figures. The present scarcity is of course due to want of rain, and the yield is estimated at only about one-third of that of last year. In auction 10 bales of last season's Belgian flowers, of fair colour, were held at 60s. per cwt.

CINCHONA.—The stock in first-hands at Amsterdam on August 11 consisted of 3,788 packages of Government and 10,462 packages private bark, including the quantity to be offered at the auction on September 1—viz., 9,498 packages, weighing 844,158 kilos. The shipments from Java during the first half of August amounted to 530,000 Amsterdam lbs., against 418,000 Amsterdam lbs. last year. In auction 28 serons of fair Loxa quill sold at from 11d. to 11 $\frac{1}{4}$ d. per lb., and for a bale of damaged 11d. was paid. A bid of 11 $\frac{1}{2}$ d. was refused for sound flat Calisaya, 1s. 3d. being the buying-in price; bold thick flat Cartagena was held at 4d. per lb.

COPPER SULPHATE.—Ordinary brands are 2s. 6d. per ton lower, at 18l. 10s. per ton, and for Anchor brand 19l. 15s. is quoted. For next season a fair amount of business has been done, for which position makers in Liverpool are quoting from 19l. 10s. to 19l. 12s. 6d., f.o.b.

CORIANDER-SEED is again dearer, Morocco having been sold at 22s. 6d. per cwt. on the spot.

FARINA.—This article is very firm, and there is a difficulty in securing first-hand offers from the Continent. The same remarks also apply to dextrin. The drought appears to have interfered with potato produce generally, and the position is considered critical in some quarters. The nominal quotation for farina is 10l. per ton, f.o.b., and for dextrin 15l. to 16l., f.o.b.

FERRI ET QUIN. CIT. is unaltered, at 5 $\frac{1}{2}$ d. per oz. in 25-oz. tins and 6 $\frac{1}{2}$ d. in 1-oz. vials, with a reduction for quantity.

CALLS.—A retail business has been done in blue Persian at full values.

GAMBIER.—Small sales of good cubes have been made at 32s. per cwt., spot.

LYCOPODIUM continues scarce, at from 2s. 9d. to 2s. 10d. per lb., c.i.f.

OIL, CASTOR.—Hull make is steady, at 24l. 7s. 6d. for medicinal quality in barrels, and 23 $\frac{3}{4}$ d. per lb. in cases, for prompt or September-December delivery.

OIL, COD-LIVER.—Although little business has been done there is a rather firmer undertone, as the Newfoundland

fishing has proved small. For best Lofoten non-congealing oil up to 160s. per barrel is asked. Our Bergen correspondent writes on August 13 that the market for cod-liver oil is quiet, with only small quantities changing hands. Nevertheless holders of fine qualities are firm, abiding the autumn, when they expect higher prices. The price of finest non-congealing Lofoten oil is maintained at 160s. per barrel, f.o.b. Bergen. The exports from Bergen to date amount to 4,178 barrels, against 1,519 barrels at the corresponding date of last year.

**OIL, OLIVE.**—A Messina advice states that the unfavourable crop-prospects in Sicily are extending to Gallipoli and the East Coast of Calabria. Gioja also begins to complain. The tendency of the market is therefore upwards, the following being the quotations:—Yellow Messina, 31l.; green Messina, 30l. 5s.; burning Russia, 32l. 10s., f.o.b. Messina; Gallipoli, 31l. 5s.; choice Gallipoli, 31l. 10s. per tun, f.o.b. Gallipoli.

**OIL, PENNYROYAL.**—The present price to buy is 18s. per lb.

**OIL, TURPENTINE,** closes dearer, at 41s. 3d. per cwt. for American on the spot.

**OPUM.**—Exceedingly quiet conditions continue to prevail, and no business of importance has been done in Turkish description. Prices are unaltered. The market for Persian is steady, but for the moment there are no inquiries. Smyrna, August 5: Business in opium has again been active, sales for the week amounting to 145 cases, including 80 cases for the United States, 22 cases for England, and 40 cases for an unknown destination. Five-sixths of the opium which changed hands consisted of fine Yerli and Karahissar, for which full prices have been paid, and the market closes much stronger for these qualities. Common grades will probably be easier. The arrivals in Smyrna to date amount to 2,092 cases, against 591 cases at the same period of last year. Constantinople, August 13: The market is much quieter, and some of the largest producing districts have been freely cabling selling orders to their agents here. This has naturally brought about the expected decline, which will become more accentuated when other districts follow the lead of Karahissar, etc. It is to be hoped that consumers and intending purchasers will aid the natural course of events by exercising a little patience. The week's sales amount to 56 cases of druggists', at from 6s. 3d. to 6s. 4d. per lb.

**OTTO OF ROSE.**—According to the British Consul at Sofia, the exports of otto from Bulgaria from 1900 to 1903 were as follows:

	1900.	1901.	1902.	1903.
Oz. ...	187,110	105,945	128,660	199,496

**PETROLEUM** is unaltered, at from 5½d. to 5¼d. per gal. for Russian, 6½d. for water-white American, 5½d. for ordinary, and 5½d. for Roumanian.

**POTASSIUM BROMIDE.**—A small arrival of American of good quality is offered by one dealer at 1s. 8d. per lb., net, ex dock.

**QUININE.**—On Monday the German makers announced a reduction of ½d. per oz., and now quote 11½d. for sulphate in bulk. Howards' make has also been reduced ½d. to 1s. 0½d. in bulk, and 1s. 2½d. in vials in 1,000-oz. lots. Whiffen's make also follows the reduction and is now 11½d. in bulk. The following are the quotations for some of the leading salts which have been lowered: Quinine benzoate 1s. 5½d., citrate 1s. 4½d., hydrochloride 1s. 4d., hypophos. 2s. 0½d., phosphate and lactate 1s. 5½d., salicylate 1s. 4d., tannate 8½d. to 9d., valerianate 1s. 7d. These prices are for 100-oz. tins. This reduction on the part of makers is certainly mysterious, and was entirely unexpected. Previous to the drop the second-hand market last week closed firmer with a fair demand on Friday and Saturday at 11d. per oz. for good brands, but subsequently a rather weaker tone prevailed, with second-hand sellers at 10¾d. to 11d.

The Amsterdam quinine-works reduced their price on August 15 by 1½f. per kilo., and now quote Ed. II. at 20f. and Ed. III. at 22f. per kilo.

The exports of quinine, quinine preparations, etc., from Germany during the five months ending May were as follows:

	1902.	1903.	1904.
Kilos. ...	84,400	61,600	77,500

**ROSIN** is easier, at from 8s. to 8s. 3d. per cwt. for common strained, ex wharf.

**SANTONIN.**—Owing to a short crop of wormseed, as noted on page 377, there is a possibility of a further advance in this article, especially when it is considered that a close monopoly controls the production.

**SENEGA** remains firm, holders quoting 3s. 2d. per lb. net; after doing business at 3s. to 3s. 1d.

**SHELLAC.**—The spot market has been quiet, with sales of fair TN Orange at 212s. per cwt. Good and fine marks are slow of sale at from 235s. to 250s., and AC Garnet is quoted at about 190s. spot. Futures are rather lower on the week, August delivery having sold at from 209s. to 210s., October 207s. 6d. to 206s., and December 200s. to 198s. per cwt. The market in all positions has not exhibited much activity.

**SPICES.**—At auction a moderate supply of Jamaica *Ginger* was offered, and partly sold at steady to occasionally easier prices, good realising 43s. to 45s. 6d., fair washed 39s., middling 35s., ordinary to ordinary dullish 30s. to 33s., and common 27s. per cwt.; Cochin was mostly bought in, including good bold selected at 65s., medium and bold at 49s., and small medium and bold at 38s. No *Pepper* was offered in auction, and privately Singapore is held for 5¼d. per lb. on the spot, at which small sales have been made; August-October shipment is quoted 5¾d. No *White pepper* was offered at auction, and privately little business has been done, the market showing a weaker tendency. Fair Singapore can be had on the spot at 7¾d. to 7¾d. per lb., and there are sellers of Singapore for August-October shipment at 7d., c.i.f. *Pimento* was dull at auction and easier, 39 bags selling, out of 430 offered, at 2¾d. for fair mixed blacks. *Chillies* were not offered, and *Capsicums* were bought in at 18s. 6d. for ordinary medium stalky. Of *Cinnamon* chips 11 bags of quillings sold at 5½d., and of 70 bags offered 30 sold at 2½d. for fair. West Indian *Nutmegs* were steady and in small supply, and *Mace* was quiet. No Zanzibar *Cloves* were offered, and of 35 cases of Penang shown 4 sold privately, the remainder being bought in at 11d. for good bright picked and 9½d. for fair dark picked. Privately the speculative market for Zanzibar has been quiet, and on Wednesday closed lower, August-October delivery selling at 7d. with sellers of October-December at 6½d.

**STAR ANISEED.**—A small business has been done at from 57s. 6d. to 60s. per cwt. on the spot.

**SULPHUR.**—A report from Messina states that the exports to U.S.A. in June were only 4,500 tons, against 13,000 tons last year. The Louisiana mines, after conquering the Western markets, are also invading the Eastern seaports. At New York a steamer arrived selling at \$21.65, the quality being reported excellent. It may, like the Japanese, contain traces of selenium, tellurium, or arsenic, while Sicilian, as is well known, does not contain arsenic. This American competition is becoming keen, and will probably awake the Sicilian people to greater efforts. The contract of the Anglo-Sicilian Company will expire in June, 1906, and already the company are making efforts for its renewal for another ten years, especially by offering advances to the mine-farmers.

**TRAGACANTH.**—There has again been a good demand at very full prices, chiefly for the low and medium grades of Bagdad, at from about 5l. to 6l. per cwt. These descriptions are now becoming scarce, and the selection on offer is poor.

**TURMERIC.**—Small sales of good bright Madras finger have been made at 12s. 6d. to 13s., and there are sellers of Cochin split bulbs at 7s. 6d. to 8s.; Bengal has been sold at 9s. 6d. spot, and for arrival 7s. 9d., c.i.f., has been quoted.

### London Drug-auctions.

After an interval of four weeks the drug-sales were resumed to-day, when the supplies consisted of "new and old" goods offered by eighteen brokers. The supplies were fairly heavy, but a fair proportion of the goods was sold, the tendency of prices being, with a few exceptions, easier. Cape aloes sold at higher prices in spite of moderate arrivals. Buchu-leaves were about steady, and Sumatra benzoin was



quite neglected. Ceylon coca-leaves were firm. Cardamoms opened at rather firmer prices, proved irregular, and closed rather easier. Cannabis indica sold at previous rates, and for Loxa cinchona steady prices were paid. Ergot brought full prices considering the quality, and Jamaica honey met with a fair demand at unaltered rates. Ipecacuanha proved slow of sale, and prices were steady to 1*l.* per lb. easier for Rio. Raw lime-juice was in large supply and neglected. Menthol met with a further decline of 1*s.* on forced sales. Nux vomica was in plentiful supply, but no business was done. Japanese peppermint oil was again easier without reserve, and for native High-dried rhubarb dearer rates were paid. Tamarinds were neglected, and easier prices were paid for Tonka beans. Jamaica beeswax was steady to rather dearer, but Zanzibar was slightly easier, other descriptions showing no alteration. The following table shows the amount of goods offered and sold, those marked with an asterisk being sold privately:

Offered	Sold	Offered	Sold
Almond-seed .....	7 ... 7	Jalap .....	39 ... 0
Aloes—		Kino .....	18 ... 5
Cape .....	57 ... 42	Kola .....	20 ... 12
Curaçao .....	54 ... 10	Lac, Liquid .....	1 ... 0
Socotrine .....	20 ... 0	Lime-juice .....	120 ... 0
Zanzibar .....	15 ... 0	Menthol .....	25 ... 23
Ammoniacum .....	9 ... *1	Musk—	
Aniseed, star .....	5 ... 0	grain .....	1 ... 1
Aniseed (Russ.) .....	20 ... 0	pod (Yunan) .....	1 ... 0
Annatto-seed .....	12 ... 12	Myrrh .....	33 ... 0
Antimony .....	50 ... 0	Nux vomica .....	381 ... 0
Areca .....	51 ... 0	Oil—	
Arrowroot .....	1 ... 0	aniseed, star .....	14 ... 0
Asafetida .....	141 ... 17	cananga .....	6 ... 0
Balsam—		cassia .....	5 ... 0
Canada .....	1 ... 1	cedarwood .....	4 ... 0
Copaiba .....	3 ... 3	citronella .....	4 ... 0
Peru .....	2 ... 0	cuscus .....	2 ... 0
Tolu .....	11 ... 3	lemon .....	12 ... 0
Benzoin—		lemongrass .....	33 ... 0
Palm-bang .....	55 ... 6	lime .....	3 ... 3
Siam .....	10 ... 0	nutmeg .....	8 ... 0
Sumatra .....	135 ... 5	patchouli .....	5 ... 0
Buchu .....	33 ... 2	peppermint .....	19 ... 23
Calumba .....	33 ... 0	wintergreen .....	1 ... 0
Camphor (refined) .....	20 ... 0	wood .....	99 ... 0
crude .....	1 ... 0	vlang-ylang .....	1 ... 0
Cannabis indica .....	24 ... *2	Olibanum .....	40 ... 0
Cardamoms .....	385 ... 235	Orange-peel .....	7 ... 1
Cascara sagrada .....	100 ... 0	Orchella-weed .....	63 ... 0
Cascarilla .....	48 ... 5	Papain .....	2 ... 0
Cashew nuts .....	24 ... 0	Purée .....	2 ... 0
Cassia fistula .....	28 ... 5	Quillaia .....	40 ... 0
Chimoniles .....	10 ... 0	Quince seed .....	8 ... 0
Chiretta .....	2 ... 0	Rhubarb .....	65 ... 11
Cinchona .....	78 ... 28	Sandalwood - chips .....	47 ... 0
Civet .....	3 ... 0	Sandarac .....	33 ... 15
Coca-leaves .....	51 ... 29	Sarsaparilla .....	83 ... 26
Cocculus indicus .....	27 ... 0	Scammony-root .....	55 ... 0
Colocynth .....	29 ... 3	Seedlac .....	59 ... 4
Cubeb .....	27 ... 0	Senna—	
Cumin seed .....	41 ... 0	Alexandrian .....	53 ... 22
Cuttle-fish bone .....	11 ... 0	Timnevelly .....	194 ... 137
Damiana-leaves .....	5 ... 0	Soy .....	50 ... 0
Dill-seed .....	33 ... 0	Sticklac .....	84 ... 11
Dragon's-blood .....	22 ... 4	Squill .....	16 ... 5
Egg-yolk .....	47 ... 0	Strophanthus .....	15 ... 0
Elaterium .....	1 ... 0	Tamarinds .....	196 ... 0
Elemi .....	15 ... 0	Tonka-beans .....	14 ... 6
Ergot .....	15 ... 7	Turneric .....	112 ... 1
Galangal .....	43 ... 0	Wax (bees)—	
Gamboge .....	3 ... 1	Chinese .....	5 ... 5
Ginger, green .....	6 ... 0	East Indian .....	112 ... 16
Guaiacum .....	2 ... 0	Jamaica .....	59 ... 59
Guarana .....	5 ... 0	Mogador .....	107 ... 0
Gum arabic .....	152 ... 23	Nyassaland .....	1 ... 1
Honey—		Spanish .....	26 ... 0
Jamaica .....	336 ... 180	Zanzibar .....	350 ... 31
New Zealand .....	158 ... 0	Wax, Japanese .....	50 ... 10
Ipecacuanha—		Wax, Caranaba .....	35 ... 0
Cartagena .....	30 ... 0	Witchhazel ext. ...	2 ... 0
Rio (Matto Grosso) .....	42 ... 4		

ALMOND-SEED, so-called, sold at 30*s.* for 7 cases from Bombay.

ALOES.—Cape was about 2*s.* 6*d.* to 3*s.* per cwt. dearer, compared with the last public sales, fair to good bright hard, part slightly drossy, selling at from 35*s.* to 37*s.*, seconds, dullish to fair 35*s.* to 36*s.*, ordinary dull and drossy 26*s.* 6*d.* to 29*s.*, and common dull mixed 20*s.* per cwt. No higher bid than 22*s.* was obtainable for good bright capey Curaçao; 30*s.* was the buying-in price, and

for 6 boxes of very dull liver 18*s.* was paid. Four other boxes of Curaçao sold at 22*s.* 6*d.* for capey and livery mixed. Good pasty Socotrine in kegs was held at 80*s.*, and for 15 cases of very skinny Zanzibar, mostly hepatics, no bid was made; 22*s.* 6*d.* was mentioned as the price of common drossy.

AMMONIACUM.—A case of fair pale drop had been sold privately and two other cases not quite so good were bought in at the fancy price of 60*s.*

ANISEED.—For Russian 21*s.* per cwt. was asked.

ANNATTO-SEED.—Twelve bags fair Madras, more or less sea-damaged, sold at from 1½*d.* to ¾*d.*, according to condition.

ANTIMONY.—The price of Japanese crude is 14*l.* per ton.

ARECA.—The price of fair is 14*s.* per cwt.

ASALETIDA.—A new arrival from Bombay was offered consisting of about 60 per cent. of gum, the remainder being very heavy sandy and unsightly block, for which 45*s.* to 50*s.* was wanted. As there are some inquiries it is probable sales have been made privately on export account.

BALSAM, CANADA.—A case of good bright thick realised 2*s.* per lb.

BALSAM COPAIBA.—Good filtered Pará sold at 1*s.* 5*d.* per lb.

BALSAM, TOLU.—Three cases of small tins which had been offered on several occasions found a buyer to-day at from 8½*d.* to 8½*d.* per lb., without reserve. The quality was doubtful.

BENZOIN.—Entirely neglected. Five cases of ordinary Sumatra seconds, partly false packed, sold, without reserve, at 97*s.* 6*d.* Good almondy seconds, with storax flavour, were held at 7*l.* Six cases of low Palembang sold at 2*s.* "if pay charges." Good pea and bean size Siam almonds were limited at 19*l.* 10*s.* per cwt.

BUCHU.—Quiet, but steady. Yellowish round leaf sold at from 6*d.* to 6½*d.* per lb., and good green longs were limited at 1*s.* 6*d.*

CANNABIS INDICA.—The price for fair tops is 4*s.* 3*d.*, at which sales are being made privately from time to time.

CASCARA SAGRADA.—A bid of 50*s.* per cwt. is to be submitted for a parcel of one-year-old bark of fair quality. Privately thin old bark is held for 62*s.* 6*d.* Reports are current that the recent cheap sellers have now become buyers, and that a syndicate has been formed in San Francisco, while a dealer states that he is unable to obtain firm offers from this source.

CASCARILLA.—Small quill was held at 45*s.*, and for 5 barrels of siftings 35*s.* was paid.

CASSIA FISTULA.—Good bold Dominica pod, part ratty, was obtainable at 25*s.* per cwt., and four bags of part mouldy sold at 10*s.* A case of bold and part ratty pod sold at 20*s.*

COCA-LEAVES sold at steady prices, fair greenish Ceylon (Huanuco character) selling at 1*s.* to 1*s.* 1*d.*, brown and slightly damaged at 9½*d.*, and common brown damaged at 2*d.* to 4*d.*

CARDAMOMS opened at rather firmer prices compared with the last public auction, but as the sales progressed the tone became irregular, and the tendency towards the close was easier, especially the medium and lower grades, of which the bulk of the offerings consisted. Seeds were firmer, however. The following prices were paid: Ceylon-Mysore, extra bold pale picked, well bleached, 2*s.* 6*d.*; good bold pale, 1*s.* 9*d.* to 1*s.* 11*d.*; bold medium pale, 1*s.* 2*d.* to 1*s.* 6*d.*; bold pale long, 1*s.* 2*d.* to 1*s.* 3*d.*; medium dullish, few open, 11*d.* to 1*s.*; brownish bold, 10*d.* to 10½*d.*; small pale, 8*d.* to 9*d.*; round brownish, smooth, 9*d.*; peas, 8*d.*; dull peas, 7*d.*; small splits, 7*d.* to 7½*d.*; brown and splits, 7*d.* to 8*d.* Seed, 9*d.* to 11*d.*; good dark, 1*s.* Good brown Tellicherry were held at 11*d.* per lb., and small to medium Ceylon-Malabar at 10½*d.*

The exports from Ceylon from January 1 to July 25 were as follows:

	1904.	1903.	1902.	1901.
Lbs. ...	597,017	489,510	362,613	271,206

Of the above 289,384 lbs. were shipped to the United Kingdom, 175,275 lbs. to India, and 99,714 lbs. to Germany.

COLOCYNTH.—For polish Turkey pulp 1*s.* 9*d.* per lb. is

wanted. Three bags of siftings sold without reserve, including dark brown at 1s.

**DILLSEED.**—Fair clean Bombay was held at 14s., a bid of 13s. being refused.

**DRAGON'S-BLOOD.**—Well-packed finger of fair colour partly sold at 8l. 15s. per cwt., being a shade easier. Good bag-shaped lump sold at 7l. per cwt., and a case of medium at 6l. 5s. per cwt. Fine bright fiery lump is very scarce and wanted.

**EGGOR.**—Privately the market has been firm, owing to confirmation of the short crops. On the spot 1s. 4d. per lb. has been paid for Russian. In Hamburg the equivalent of 1s. 4½d. was said to have been paid early in the week. Russian to-day is quoted 1s. 4½d., c.i.f. In auction 7 bags of weevily Russian sold at 1s. 4d. per lb., and for fair Spanish 1s. 7d. was wanted.

**GAMBAGE** is still scarce. An offer of 14l. 10s. was refused to-day for fair part blocky Siam pipe, and for a case of damp and blocky pickings 14l. 2s. 6d. was paid.

**GUARANA.**—Five cases of sausage were limited at 3s. per lb.

**GUM ARABIC.**—In auction three cases of good pale picked Trieste gum were bought in at 85s., and for a parcel of new-crop Kordofan gum, palish half hard sorts, the actual selling-price did not transpire. Twenty-three bags Australian sold at 17s. 6d. for red glassy, partly frosted sorts. Privately the market is very bare of so-called Persian insoluble sorts, and a good demand is expected for the new crop on arrival.

**HONEY.**—About steady. Good liquid amber Jamaica in cases brought 24s. per cwt., good red liquid in cases 22s. 6d., darker ditto 19s. 6d., and a string of rather dark liquid amber to brown in mixed packages sold at from 15s. 6d. to 16s. 6d. Pale setting in barrels sold at 17s. per cwt.

**IPCACUANIA.**—Slow of sale at about steady to 1d. per lb. easier rates. The bulk of the offerings of Rio (Matto Grosso) was held at from 4s. 6d. to 4s. 7d. per lb. for ordinary to fair lean, but three bales of ordinary sold at 4s. 5d., and a bale of sea-damaged changed hands at this figure. The quality of the offerings as a whole was only poor. Cartagena was also neglected, holders asking 4s. 4d. to 4s. 6d. per lb., but no business was effected publicly.

**KINO.**—Five cases were sold, without reserve, at lower prices, fair black Cochin grain realising from 2½d. to 3d. per lb. A case of fine red Malabar was bought in at 10d.

**KOLA.**—Twelve barrels of ordinary mouldy and part shrivelled African sold at from 2½d. to 3d. per lb., and for two bags of fair bold West Indian 5½d. was wanted.

**MENTHOL.**—In auction 23 cases of Kobayashi crystals sold, without reserve, at from 11s. to 11s. 3d. per lb., and for 2 cases of Yazawa brand 10s. 10½d. was paid, these prices marking a decline of about 1s. per lb. on those paid at the sale a month ago. Privately business has been done in Kobayashi for October-November shipment at 10s. 6d. per lb., c.i.f., and to-day there are sellers at 10s., c.i.f.

**MUSK.**—A bottle of grain musk, which has been shown on several occasions, sold at 15s. per oz., subject.

**OIL, CINNAMON-LEAF.**—The price for Ceylon leaf oil is 2½d. per oz., and for 2 cases of bark oil 10d. per oz. was wanted.

**OIL, EUCALYPTUS.**—For oil containing 68 per cent. cincol, according to analysis, 1s. 1d. per lb. was wanted.

**OIL, LIME.**—Three cases of fair West Indian distilled brought 1s. 6d. per lb., being steady.

**OIL, PEPPERMINT.**—In auction 23 cases of Japanese dementholised oil (Kobayashi) sold, without reserve, at from 4s. 10d. to 5s. per lb., and one lot at 5s. 1½d. per lb., being about 3d. per lb. easier. For October-November shipment sellers of Kobayashi brand ask 4s. 10½d., c.i.f., with buyers at 4s. 9d. Nine cases of American HGH were held at from 15s. to 15s. 3d. per lb.

**OIL, WINTERGREEN.**—A case of D and O brand realised 7s. 6d. per lb., no allowance for draft, tret, or discount.

**ORANGE-PEEL.**—The supply of Maltese on the spot is practically exhausted, and 1s. per lb. is now asked. In auction a case of thin cut but dull and dark sold, without reserve, at 7½d. per lb.

**RHUBARB.**—The principal demand was for horny native High-dried, about 15 cases of which changed hands at 8½d. per lb. for round, with three-quarters pinky fracture, one quarter dark. These prices were dearer. Fourteen cases of good flat High-dried, with three-quarters good pinky fracture, were held at 1s. 2d., which is now the price at which private sales have been made. Fine bold round Shensi, with three-quarters good pinky fracture, was bought in at 3s. 6d. per lb.; and for good Shensi trimming root a bid of 3s. 4d. was refused, 3s. 6d. being wanted.

**SANDARAC.**—Fifteen cases of Mogador pickings sold at 36s. per cwt., subject to seller's approval.

**SARSAPARILLA.**—Easier. There was an absence of good quality of any description, which probably accounts for the indifference of buyers. Rather coarse Lima-Jamaica sold at 10d., which was the price for a further 13 bales, mostly damaged. Twelve bales of fair grey Jamaica sold at from 1s. to 1s. 1d. per lb., and a bale of medium native red sold at 9d. Privately business has been done in grey Jamaica at 1s. 2d.

**SCAMMONY-ROOT** is unaltered, at 19s. per cwt. Stocks remain large.

**SEEDLAC.**—Good native Madras scabs were held for 8l., block sold at 6l. 5s., and siftings at 7l. 10s. per cwt.

**SENNA.**—Practically all the Tinnevely offered was sold at fully steady to ¼d. dearer prices. Very little of bold greenish quality was offered. Ordinary small and specky greenish sold at 1½d. to 2d. per lb., small greenish, partly specky, 2½d., small greenish 2½d. to 2¾d., medium greenish 3d. Pods were mostly bought in, a few selling at 1½d. per lb., being rather dearer. Part of the Alexandrian had been sold privately, and for pale pods 5½d. was paid. Fair greenish leaf is worth from 4¾d. to 5d. per lb.

**SQUILL.**—Five bags of fair pale sold at 2½d. per lb.

**STICKLAC.**—Eleven cases of dust sold at 52s. per cwt.

**TAMARINDS.**—In large supply and neglected. Good squashy Barbados in bond were limited at 8s. 6d. per cwt.

**TONKA BEANS.**—Two cases of fair, partly frosty Pará beans sold at 9d. per lb., subject, and for 4 cases of common partly reddish and foxy 7d. to 8d. per lb. was paid.

**WAX, BEES'.**—Zanzibar was in plentiful supply, and sold at rather easier prices, including pale brown block at 6l. 15s., part foul at 6l. 10s., and common heated at 6l. 7s. 6d. Jamaica sold at fully steady to rather firmer prices. Fine bright red sold at 7l. 12s. 6d., and for fair to red and brown mixed from 7l. 7s. 6d. to 7l. 10s. per cwt. was paid. The quantity disposed of was more than usual. Eleven cases of good yellow Calcutta sold at 6l. 7s. 6d., and some bleached Calcutta had been sold privately. A bag of wormy Nyassaland realised 80s., and for Spanish 6l. 5s. was the limit, bleached being held at 7l. 10s. Mogador was limited at from 5l. 15s. to 6l., according to quality. Five cases fair Chinese block sold at from 4l. to 4l. 10s.

**WAX, JAPANESE.**—Rather easier, fair pale squares selling in auction at 55s. per cwt.

## Recent Wills.

**ALLISON.**—The will of the late Mr. Edward H. Allison, of the firm of E. and H. Allison, wholesale druggists, Hull, who died on April 2, has been proved at the York District Registry by his widow, Mrs. Ann Jane Allison, the sole executrix. The gross amount of the estate is 1,275l. 18s. 8d., and the net personally 192l. 17s. 10d.

**DOWNING.**—The late Mr. Frederick Downing, chemist and druggist, Launceston, who died on February 6, has left a gross estate of 1,254l. 0s. 6d., including net personally 518l. 0s. 1d. The executors named in the will are Mr. Charles James Park, pharmaceutical chemist, Mutley Plain, Plymouth; Mrs. Mary Downing, of High Street, Launceston, testator's widow (but during widowhood only); and Mr. Charles Downing, brother of the testator (who renounced probate).

**MILLS.**—The will (with a codicil) of the late Mr. Robert Mason Mills, chemist and druggist and mineral-water manufacturer, who died on March 17, has been proved at the Principal Probate Registry by Emily Fanny Baxter (wife of Thomas Moore Baxter), daughter of the deceased, and Thomas Moore Baxter, aerated-water manufacturer, both of Bourne. The gross amount of the estate is valued at 15,080l. 5s. 7d., and the net personally 4,402l. 12s. 6d.